
THE JOURNAL^{OF} LIBERTARIAN STUDIES

AN INTERDISCIPLINARY REVIEW

VOLUME VII, NUMBER 2

FALL 1985

Antoin E. Murphy	Richard Cantillon—Banker and Economist
Micheál Ó Súilleabháin	Richard Cantillon
Vincent J. Tarascio	Cantillon's <i>Essai</i> : A Current Perspective
David O'Mahony	Richard Cantillon—A Man of His Time: A Comment on Tarascio
Robert F. Hébert	Was Richard Cantillon an Austrian Economist?
Murray N. Rothbard	Professor Hébert on Entrepreneurship
Roger W. Garrison	West's "Cantillon and Adam Smith": A Comment
Leonard P. Liggio	Richard Cantillon and the French Economists: Distinctive French Contributions to J. B. Say
Joseph T. Salerno	The Influence of Cantillon's <i>Essai</i> on the Methodology of J. B. Say: A Comment on Liggio

Editor

Murray N. Rothbard
Department of Social Sciences
Polytechnic Institute of New York

Managing Editor

Dan Fiduccia
Center for Libertarian Studies
Burlingame, CA

Editorial Board

D. T. Armentano
Department of Economics
University of Hartford

Randy E. Barnett
Chicago-Kent College of Law
Illinois Institute of Technology

Walter Block
The Fraser Institute
Vancouver

Yale Brozen
Graduate School of Business
University of Chicago

Arthur A. Ekirch, Jr.
Department of History
State University of New York, Albany

Williamson M. Evers
Department of Political Science
Stanford University

Antony Flew
Department of Philosophy
York University

David Gordon
Los Angeles, California

John N. Gray
Department of Politics
Oxford University

John Hagel, III
New York, New York

Jean-Pierre Hamilius
Luxembourg

Ronald Hamowy
Department of History
University of Alberta

F. A. Hayek
Nobel Laureate in Economics
University of Freiburg

John Hospers
Department of Philosophy
University of Southern California

M. Bruce Johnson
Department of Economics
University of California, Santa Barbara

Ludwig M. Lachmann
Department of Economics
New York University

Leonard P.iggio
Institute for Humane Studies
George Mason University

William Marina
Department of History
Florida Atlantic University

James J. Martin
Colorado Springs, Colorado

Felix Morley⁷
Gibson Island, Maryland

Robert A. Nisbet
American Enterprise Institute
Washington, D.C.

Gerald P. O'Driscoll, Jr.
Federal Reserve Bank of Dallas

Ellen Frankel Paul
Social Philosophy and Policy Center
Bowling Green University

Jeffrey Paul
Social Philosophy and Policy Center
Bowling Green University

Joseph R. Peden
Department of History
Baruch College,
City University of New York

Ralph Raico
Department of History
State University College, Buffalo

Douglas B. Rasmussen
Department of Philosophy
St. John's University

Mario J. Rizzo
Department of Economics
New York University

Llewellyn H. Rockwell, Jr.
The Ludwig von Mises Institute
Auburn University

James J. Sadowsky, S.J.
Department of Philosophy
Fordham University

Sudha R. Shenoy
Department of Economics
University of Newcastle

Louis M. Spadaro
Department of Economics
Fordham University

Joseph R. Stromberg
Fort Myers, Florida

Thomas S. Szasz, M.D.
Department of Psychiatry
State University of New York

Leland B. Yeager
Department of Economics
University of Virginia

⁷deceased

THE JOURNAL OF LIBERTARIAN STUDIES

VOLUME VII, NUMBER 2 FALL 1985

CONTENTS

Antoin E. Murphy	185	Richard Cantillon—Banker and Economist
Micheál Ó Súilleabháin	217	Richard Cantillon
Vincent J. Tarascio	249	Cantillon's <i>Essai</i> : A Current Perspective
David O'Mahony	259	Richard Cantillon—A Man of His Time: A Comment on Tarascio
Robert F. Hébert	269	Was Richard Cantillon an Austrian Economist?
Murray N. Rothbard	281	Professor Hébert on Entrepreneurship
Roger W. Garrison	287	West's "Cantillon and Adam Smith": A Comment
Leonard P. Liggio	295	Richard Cantillon and the French Economists: Distinctive French Contributions to J. B. Say
Joseph T. Salerno	305	The Influence of Cantillon's <i>Essai</i> on the Methodology of J. B. Say: A Comment on Liggio

This issue, Vol. 7, No. 2, of the *Journal of Libertarian Studies*, will be wholly devoted to a study of the neglected founder of modern economics, the Irish-French banker, Richard Cantillon. This is the first journal issue ever devoted to Cantillon, based on a tricentennial conference in California. The issue includes a path-breaking biographical article by Professor Antoin Murphy, the first English translation of a famous introduction to the German translation of Cantillon by F. A. Hayek, and articles by Vincent Tarascio, Robert F. Hebert and others.

The Journal of Libertarian Studies is published semi-annually by the Center for Libertarian Studies, a nonprofit, privately supported institute dedicated to research and scholarship and the ideal of a free society. Annual subscription rates are \$25 for institutions and \$17 for individuals. Non-U.S. subscribers please add postage as follows: \$4 for surface delivery; airmail, \$6 for Canada and Mexico, \$10 for others. (U.S. dollars only, please.) Address inquiries to *The Journal of Libertarian Studies*, P.O. Box 4091, Burlingame, Calif. 94011, Telephone: (415) 342-6569. Copyright 1985 by the Center for Libertarian Studies, ISSN 0363-2873.

The Journal of Libertarian Studies is abstracted and indexed in *Historical Abstracts*, *America: History and Life*, *Political Science Abstracts*, *International Political Science Abstracts*, and *The Philosopher's Index*.

Information for authors. The *Journal* publishes both solicited and unsolicited manuscripts. Authors submitting manuscripts should provide two clear copies, and both the entire manuscript and notes should be double-spaced. Please type on only one side of the page, using adequate margins. Authors should enclose a stamped, self-addressed envelope if the return of the manuscript is requested. All manuscripts and correspondence should be addressed to: Editor, *Journal of Libertarian Studies*, P. O. Box 4091, Burlingame CA 94011 U.S.A. Telephone: (415) 342-6569.

Articles should not exceed 12,000 words. Notes must be according to the style used in the *Chicago Manual of Style* (University of Chicago Press) or authors must resubmit them in correct form if the accepted manuscript is to be published. Notes should be placed at the end of the manuscript rather than at the bottom of pages and must include complete bibliographical information; note pages should be consecutively numbered following the text.

The *Journal* edits articles for clarity, brevity, and in accordance with the *Chicago Manual of Style*. After editing, authors will receive galley proofs for proofreading purposes only.

Authors should include information on their titles and professional affiliations, along with mailing address and telephone numbers. Authors should also indicate if the manuscript is to be published elsewhere or presented at a conference.

Subscription information. See preceding page.

Back Issue Information. Volumes I through VII are available for sale at \$10 per copy (not all copies may be available). Allow four weeks for delivery. Payment must be made in U.S. dollars. Subscription and back issue information available upon request.

Richard Cantillon—Banker and Economist*

by Antoin E. Murphy

*Department of Economics
Trinity College, Dublin*

On Tuesday, the 14th of May 1734, the First Earl of Egmont noted in his diary: "I was most disagreeably surprised at my arrival in town to hear that my brother Percival was this morning at four o'clock burnt out of his house and had lost all his furniture, except his plate, some pictures, and some books. The Fire began, as he told me at the next house, lately taken by Mr. Cantillon, the rich banker whom I knew at Paris, who was but lately come to the house, and was burnt in his bed, of which there are varying reports, some saying he came drunk home at twelve at night, and fired his curtains, others that he read himself to sleep and the candle fired his bed, others that his servants murdered him and then fired the house to conceal their crime. He was a debauched man, and his servants of bad reputation so being very rich it is thought they were tempted to commit this fact, for which informations were taking when I visited by brother on this great loss, amounting as he tells me to £700. I desired him to go to my house in Pall Mall." Historical Manuscripts Commission, (Egmont Diary, Vol. ii, pp. 102).

The *Monthly Intelligencer* (The Gentleman's Magazine) for May 1734 noted "Tuesday 14. Mr. Cantillon, A French Wine-Merchant in Albermarle Street, was found smothered in his Bed, and his head almost burnt or cut off. A fire which began in his chamber about three o'clock the same morning consum'd that and the two adjoining houses, and damaged others. He had to the value of £200,000 in the house which, with other circumstances caused a suspicion of villainy in the affair. His servants were all committed to prison; but the cook, who had been

*This paper was presented to the symposium on Richard Cantillon in Pacific Grove, California, August 1980.

I would like to express my gratitude to the following for their kind assistance: Mme. Jurgens (Minutier Centrale, Archives Nationales, Paris), Dr. Jean Paul Pittion (Department of French, Trinity College, Dublin), Mr. William Slevin (Genealogical Office, Dublin Castle), Dr. Padraig de Brun (Institute for Advanced Studies, Dublin), Professor Louis Cullen and Dr. David Dickson (Department of History, Trinity College, Dublin) and Dr. Desmond Norton (Department of Economics, University College, Dublin). Any errors are solely those of the author.

discharged about three weeks before, escaped beyond sea, with a seemingly large and valuable cargo, under a feign'd name: £200 reward is offered for a discovery."

The event was sufficiently important for it to be reported in the *Mercure de France* in June 1734 "Le feu prit le 25 du mois dernier chez. M. Cantillon, dont la maison fut entièrement brûlée, et qui perit lui-même dans les flames; on a arrêté deux hommes et une femme de ses domestiques qu'on soupconne d'avoir tué et volé leur maître et d'avoir mis ensuite le feu à sa maison."

Under the heading of domestic occurrences in December 1734, the Gentleman's Magazine informs us that "Issac Burridge, Roger Arnold and Elizabeth Pembroke, tried for the murder of their master, Mr. Cantillon, and firing his house were found not guilty."

The person in question was of course Richard Cantillon, the author of *Essai Sur La Nature Du Commerce En Général*. Just as his death was controversial so also was his life and the publication of the *Essai*, twenty one years after his murder.

Scion of a Kerry family dispossessed of their lands by the Cromwellian and Silliamite confiscations in Ireland, he became a multi-millionaire as a result of his financial manipulations during the Mississippi System of John Law between 1718–20, only to end up murdered in his bed by his French chef in London in 1734. At some time between 1720–34 he had time to write the *Essai*—and a statistical supplement which has been unfortunately lost—a book, described by Jevons as "the first systematic treatise on economics".

Yet, despite his action-packed career little is known about Cantillon. Described as an "inconnu" by Du Hautchamp in the *Histoire Du Visa* (1743), a book giving details on the fortunes and background of the lucky Mississippians, Cantillon seemed to covet anonymity in the circles in which he mixed. His success in covering his tracks may be judged by the mistakes made about Cantillon and his family on the publication of the *Essai* in 1755. Some of these errors, as will be shown, have been compounded by 19th and 20th century commentators.

This paper is essentially a report of work in progress. Rather than attempting to give a chronological listing of Cantillon's career a number of specific issues, incorporating new evidence, are discussed. These issues are:

- (1) Cantillon's family background
- (2) The relationship between Cantillon and John Law
- (3) Hume and Cantillon's views on the Monetary Approach to the Balance of Payments.
- (4) The mystery surrounding the delayed publication of the *Essai*.

Cantillon's Family Background

This section of the paper deals with Cantillon's Irish background. Up to now quite an amount of the material produced on Cantillon's background has been inaccurate and misleading. The approach here aims at producing a more definitive

account of the family background in the hope that this assembly of parts of the Cantillon “jigsaw” will eventually produce a definite date of birth for the economist. It is of interest, after all, to know whether Cantillon wrote the *Essai* as a young man in his thirties or as a more mature banker of fifty.

There are a number of purported genealogies on Richard Cantillon. The common characteristic of these genealogies is that they are based on 19th century attempts by French families to establish their “roots” and in one case an attempt to “cook” a false pedigree for the purpose of claiming the title of Baron of Ballyheigue.

The errors on Cantillon’s genealogy have been further compounded by Joseph Hone’s biographical note in the *Economic Journal* which attempted to draw these genealogies together to provide a comprehensive picture of Cantillon’s family background.¹

In this section of the paper, a number of contemporary 17th and 18th century documents relating to the Cantillon family are presented for the first time—including a genealogical table ordered by the economist himself—which gives a completely different picture to that of Hone.

These documents give valuable information as to the possible birthplace of the economist, indicate that the family’s banking connections were more extensive than have so far been considered, and also show why researchers have found it difficult to piece together the family tree of the Cantillons.

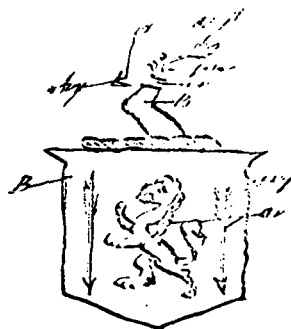
In the 19th Century two French families made attempts to investigate the background of the Cantillon family. As a result of his efforts Antoine Sylvain de Cantillon was instrumental in having the *Notice Historique, Généalogique et Biographique de la Famille De Cantillon* published in 1844.² In 1879, Joseph and Henry Cantillon de Lacouture published another genealogy on the Cantillon family which was used by John Nagle and is known as the Bellac Genealogy.³

In working on what eventually became the *Notice Historique*, Antoine Sylvain de Cantillon contacted Sir William Betham, Ulster King-at-Arms in the Genealogical Office in Dublin. Betham seems to have provided him with a certain amount of detail on the Cantillon family.

Sir William Metham also produced what seems to be his own hesitant effort at investigating the Cantillon family and this can be seen in the Genealogical Office, Dublin Castle. It is reproduced in table 1. It was this document—which includes a date of birth of the 16th of March 1697 for a Richard Cantillon—alongside the *Notice Historique* and Nagle’s interpretation of the Bellac genealogy that Hone used as the basis for his biographical note on Richard Cantillon in 1944. Hone’s genealogical table on the Cantillon family is reproduced in table 2.

Hone’s account is inaccurate on three levels:

- (1) It is internally inconsistent.
- (2) It relies heavily on the “cooked” pedigree of the *Notice Historique*.
- (3) It applies Betham’s findings to the wrong side of the family.



Thomas Cantillon of Fethy, County Kerry and Lishdown
died 2 Feb 1613

— Honora — Maurice
de Lorr Comtes
died 2 Oct
1625

Richard Cantillon

Richard Cantillon

Philip Cantillon
of Ballyleigh Esq

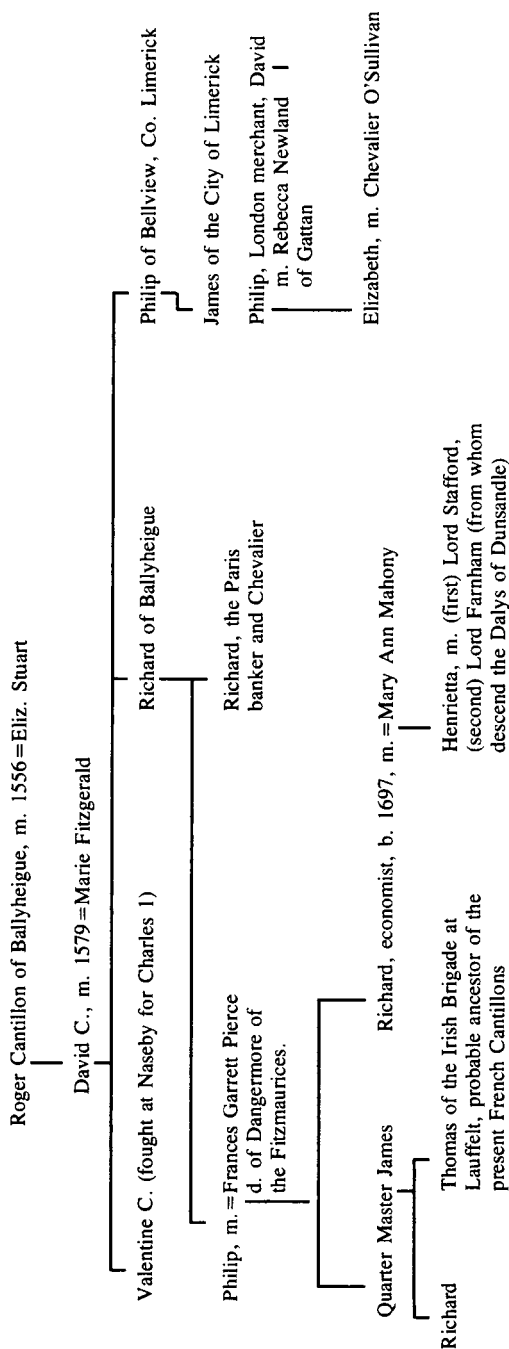
— Frances daughter of
Gawalt Pierre
Haugensonne Esq
of the Fitzmaurice

Thomas
Philip Cantillon — Mary — daughter of
Richard
16 March 1697.
George M.S. 13. 14) Count of Hildburghausen

TABLE 2

FAMILY OF RICHARD CANTILLON, ECONOMIST

Collated from investigations of Stanley Jevons, Henry Higgs, Richard Hayes (Studies, 1942), from Bellac Pedigree (Studies, March 1932) and from pedigrees in Genealogical Office, Dublin Castle.



Internal Inconsistencies

As an example of the internal inconsistencies in Hone's paper one finds that while he uses Richard Cantillon's will to show that the economist had two nephews, Richard and Thomas, he rejects both Betham's attribution of a brother Thomas to the economist (see Table 1) and more importantly he rejects the fact that Richard Cantillon in his will specifically left a legacy to his brother Thomas

"I bequeath unto my Brother Thomas Cantillon twenty five pounds sterling English per annum during his natural life and redeemable by four hundred pounds sterling."
(Extract from Richard Cantillon's will dated the 11th of April 1734⁴)

Hone on the other hand says "After collating my various sources of information I am inclined to believe that this James was a brother of the economist (in a footnote he adds 'the Thomas, added in pencil on the Betham pedigree, would then be an error for James') and that the nephews mentioned in the economist's will Richard and Thomas were sons of James—Thomas being the soldier at Lauffelt."⁵

Thus, notwithstanding the fact that both Betham and Cantillon himself, through his will, indicate that there was a brother Thomas, Hone replaces him with Captain James.

Étude LXVI, 363 in the Minutier Centrale (Archives Nationales Paris) confirms that Captain James was the brother of the Chevalier. Dated the 30th August 1717, it indicates that James Cantillon, a captain in Dorrington's Regiment, is a brother of the Chevalier Richard Cantillon, banker in Paris.

The "Cooked" Pedigree of the *Notice Historique*

In 1838 the Chevalier Cantillon wrote two letters to Sir William Betham in the Genealogical Office in Dublin Castle requesting information on his Irish ancestors. In 1840 the Chevalier, a Lieutenant Colonel in the 3rd Hussard Regiment, was created Baron of Ballyheigue by Louis Phillippe. By 1843 the "Baron of Ballyheigue, Lt. Colonel of the 3rd Hussards, President of the Council of War in Paris" writing to a member of the O'Connell family addressed him as "my dear relative" and went on to add "a celebrated painter in Paris has reproduced in a painting, which is today owned by me, a historic subject concerning my family and yours. It concerns my great grandfather who was also uncle of Mary O'Connell, wife of your great uncle."⁶ The subject is taken from the archives of the Department of War in Paris . . .⁷ He explains that the picture in question showed the heroic action taken by Captain James Cantillon at the battle of Malplaquet in 1709 and goes on to ask his "dear relative" if he is interested in purchasing some copies of this painting, at three francs a copy, from him.

The *Notice Historique* was undoubtedly compiled at the request of the Baron Antoine Sylvain de Cantillon as it makes him a grandson of Captain Thomas Cantillon, a hero at the battle of Lauffelt, and a great grandson of Captain James

Cantillon a hero of Malplaquet. As an additional bonus he could claim kinship with one of the great 19th century political figures in Ireland, Daniel O'Connell—the Liberator.

Mr. Guy Antonetti⁸ has recently shown that the Baron fabricated the genealogy in the Notice Historique. He has shown that the Baron's grandfather was Antoine Seraphin Cantillon, a master tailor, and his great grandfather Valentin Cantillon, a legal official.

Antonetti believes that the "Baron" requested details on the family and military career of Captain Thomas and Captain James Cantillon from the French War Office and then wrote to the Genealogical Office in Dublin requesting further details on the family background of these two soldiers. Some information was obviously obtained from Ireland and from this potpourri of French and Irish sources the Notice Historique was assembled, tracing a long line of brave soldiers in the family of the "Baron." Armed with this documentation Lt. Colonel Antoine Sylvain de Cantillon claimed the title Baron of Ballyheigue!

Hone's Interpretation of Betham

The Betham manuscript, reproduced in table 1, which Hone refers to, seems to have been compiled by Sir William Betham during his research on the Cantillon family. Hone uses it to show that the economist Richard Cantillon was a son of Philip Cantillon and Frances Garret Pierce and a brother of Captain James. It will be shown that Philip Cantillon and Frances Pierce were the parents of Captain James and the *Chevalier Richard Cantillon* rather than Richard Cantillon, the economist.

The Alternative Approach to Richard Cantillon's Background

In 1724, James Terry, Athlone Pursuivant, who came over to France with James II, wrote to Richard Cantillon from Versailles.

"I am sorry you sent to Mr. Hawkins for Ireland for your Genealogie, which you were sincible yt I came over with the late Deceased King, and then brought with me his records of the Kingdom"

William Hawkins (1698–1736) was Ulster King at Arms in Ireland at the time and obviously Terry felt disappointed that Cantillon had sent away to his successor details of his genealogy.

Two documents in the Genealogical Office Dublin represent Hawkins' reply to Richard Cantillon. G.O. Manuscript 159 contains a genealogical table which is duplicated in the form of a genealogical tree in GO Manuscript 160. Manuscript 159 contains a letter, dated London June 3rd 1729, from Dermot O'Connor which includes the following:

"Sir,

Pray as soon as you receivd this write all in your hand, and when you fix your seal offico, get it attested as proper before the Lord Mayor there, and if occasion requird in a notary publicke and send it to Mr. Cantilon without delay and you'll oblige.

Sir, your most humble servant.

Derd. O'Connor."¹⁰

This document, without the letter, is duplicated in genealogical tree format in Manuscript 160 and is signed William Hawkins, Ulster King at Arms.

This document, it is maintained, is William Hawkins' reply to Cantillon's request in 1724 for details on his genealogy. It must be noted however that Sir William Betham has written notes across both manuscripts expressing reservations about their accuracy. On manuscript 160 he states "this pedigree is certainly very incorrect if not a fabrication. I am astonished at its appearance here." While on manuscript 169 he is more restrained in stating that "this pedigree or at least the *early part of it* is a stupid fabrication."

Betham's reservations are about the early part of the genealogy which traces Cantillon's family back to Raymond Le Gros who came over to Ireland with Strongbow in the 13th Century. It is unlikely that an official genealogist such as Hawkins would make mistakes about Cantillon's immediate pedigree.

Table 3, reproducing Cantillon's immediate predecessors over four generations, is taken from G.O. Mss. 159. 160. It shows a Richard Cantillon marrying Anna, daughter of Daniel Mahony, and as having a brother Thomas. His parents are Richard Cantilon and Brigid, Daughter of Cantilon in County Limerick. The parents given explain part of the difficulty of tracing Cantillon's ancestors—his mother's maiden name was Cantillon and as we shall see her family in County Limerick was interrelated to the Ballyheigue Cantillons.

Table 3 also shows that the family alternated the names Richard and Thomas for each generation. Thus the economist's elder brother was Thomas, son of Richard. They were grandsons of a Thomas Cantillon and the great grandsons of a Richard Cantillon.

Corroboration of Cantillon's immediate ancestry is given by a manuscript—reproduced in Appendix A—which will be referred to as the O'Connell manuscript. A genealogical tree based on the information contained in the O'Connell manuscript is produced in table 4.

The O'Connell manuscript is of great assistance in helping to unfold the family background of the economist for the following reasons:

First, it confirms the Hawkins genealogy on the parents of the economist and goes on to state that Richard Cantillon from Ballyheigue and Bridget Cantillon from County Limerick were related in blood, and needed to obtain a dispensation to get married. This would indicate that the economists' parents were Catholics. The family was descended from a Norman knight who accompanied Strongbow during the invasion of Ireland. The writer adds that the Cantillon family were "undoubted gentlemen."

TABLE 3
GENEALOGICAL TREE OF RICHARD CANTILLON

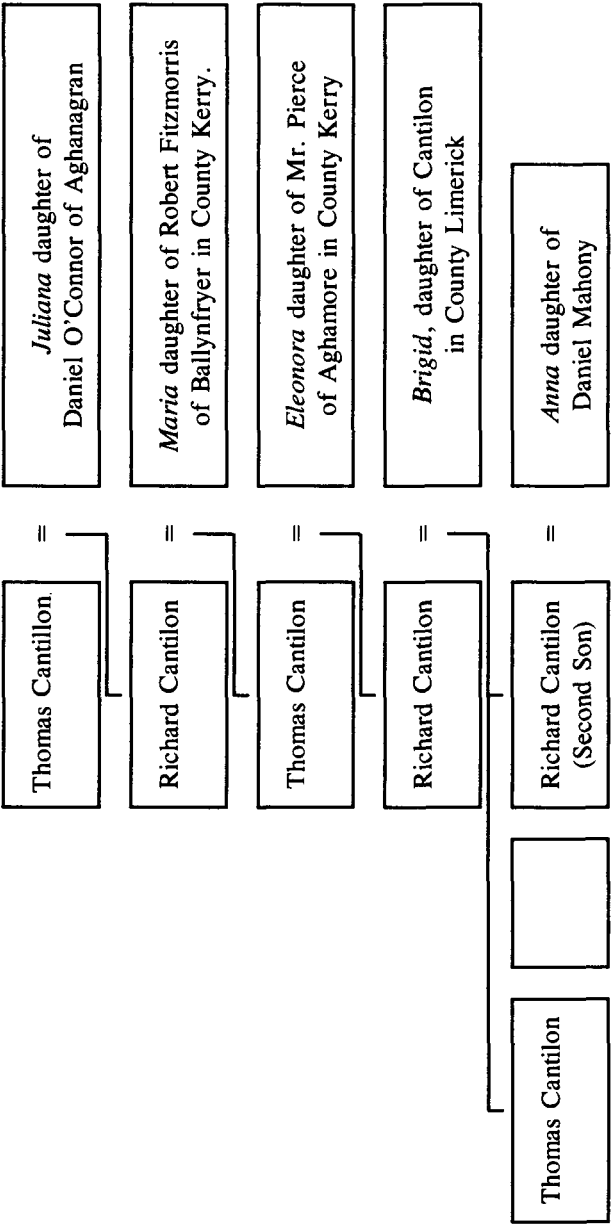
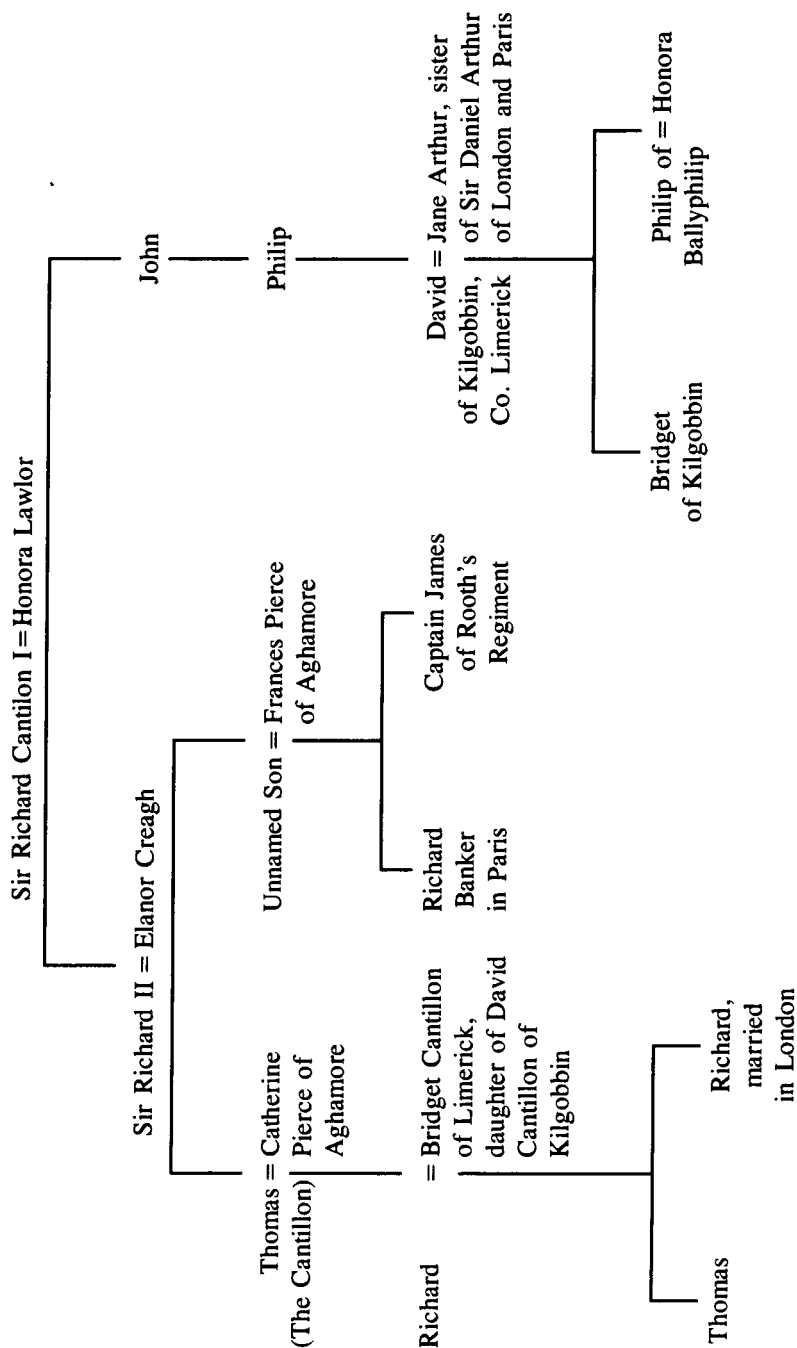


TABLE 4



Secondly, it indicates how Betham, and later Hone, mixed up the parents of the economist. Richard Cantillon, who was born in 1601 and died circa 1653, had two sons who married the Pierce sisters of Aghamore. The O'Connell manuscript has Thomas "the Cantillon" marrying Catherine Pierce and an unnamed brother marrying Frances Pierce. Betham, Table 1, has a Philip Cantillon of Ballyheigh marrying Frances Pierce. The sons of this marriage were the Chevalier Richard and Captain James, according to the O'Connell manuscript, rather than Thomas and Richard Cantillon, the economist, according to Betham. Richard Hayes confirms that Captain James was the eldest son of Philip Cantillon.¹¹ Thus Captain James and the Chevalier Richard were first cousins once removed of the economist. The Chevalier is mentioned as a first cousin of the economist in A.N. Min., Étude LXVI, 358, (17th Feb. 1716.) and it must be noted that Terry, the official genealogist to the Jacobites in France, refers to the Chevalier as being the economist's "cozein" in his letter to Richard Cantillon of February 24, 1724.¹²

Obviously there was a considerable age difference between the Chevalier and the economist as the latter was known as Richard Cantillon Junior during the lifetime of the Chevalier. The Almanach Royal lists their bank as Richard Cantillon & Junior, rue de l'Arbre Sec for the years 1716 and 1717.

But the Chevalier Richard Cantillon was not the only banking connection that the economist had in his family. The O'Connell manuscript notes that the economist's mother Bridget was a daughter of Jane Arthur, the sister of Sir Daniel Arthur of London and Paris. Daniel Arthur was a prominent banker in London at the end of the 17th and the start of the 18th century. Antonetti¹³ has shown that from 1706 the Chevalier was the Paris correspondent for Sir Daniel Arthur's London-based bank, an association that dramatically increased the banking business of the Chevalier. Future research may show that it was the economist's connection with Daniel Arthur, rather than the Chevalier, which was more important in the development of his banking career.

A Synthesis of Available Evidence

Combining the Hawkins and O'Connell manuscripts an attempt is made in Table 5 to provide a genealogical table of Richard Cantillon's direct ancestors. This table is cross checked with contemporary 17th century documents where possible.

The line starts with Thomas Cantillon (died 1613) and his wife Honora Lawlor (died 1625). This differs from both the Hawkins and O'Connell account of matters. Hawkins has Thomas married to Juliana O'Connor and the O'Connell manuscript states the Honora Lawlor was married to Sir Richard Cantillon the First.

However, both Betham (see table 1) and M. A. Hickson¹⁴ had 17th Century documentation available which proves that Thomas Cantillon was married to Honora Lawlor. Hickson quotes the following from a contemporary 17th Century document:

"Thomas Cantylone died 2 February 1613 seised of the three Ballyheigues of Heyston, Lyshycronikane, Lyshydowne, Ballyronan, Clonmore, Clonylanahane, one water mill

Lodge's Records of the Rolls¹⁵ show that on the 10th of June 1639 there was "a grant (in virtue of the said Commission and for the fine of £5) to Richard Cantellon, Geneleman, Barony of Clanmorris, Co. Kerry, of the towns and lands of Ballyrenane, Cahir-Sereky, Clon-Soulighane, Cloghandagory, Boulynshease and Plowland, the three Ballyheigs, Clounmore, Lissicronigane, Lyssdonyne and Plowlands, Tonereagh and Plowland, The Chief Rent of £—out of Killynendace".

Despite the misspellings, a common feature of 17th century documents, the lands mentioned here correspond broadly with those owned by Thomas Cantillon.

The Book of Survey and Distribution shows that in the parish of Ballyheigue, Barony of Clanmaurice, a number of Cantillons "papist Landowners" forfeited their lands to Cromwell planters in the 1650s. The names mentioned are Richard and Ellen Cantillon of Ballyheige forfeiting 639 acres and Thomas Cantillon of Ballyraniny and Tenereigh forfeiting 787 acres. Judging by the way Richard and Ellen Cantillon's names are linked in the Book of Survey and Distribution it appears that Richard was married to Ellen (Eleanor) Cantillon.

Hart's Irish landed Gentry's list of forfeiting proprietors mentions Ellen Cantillon, Richard Cantillon (deceased), Thomas McShane Cantillon and Thomas Cantillon, alias Cantillon, Ballyronane.

There are two interesting points to note from Hart's list. In the first place the Thomas Cantillon, alias Cantillon, Ballyronane seems to be "The Cantillon" mentioned in the O'Connell manuscript as the grandfather of the economist. In the second place the great grandfather, Richard Cantillon, was dead by the time of the forfeiture.

This latter fact is confirmed by the correspondance of the Crosbie family in which on the 14th of March 1653 a Richard Cantillon is mentioned in the answer of David Crosbie to a Bill of Complaint.¹⁶ In this bill Crosbie maintains that Richard Cantillon minded some cattle for him in the 1640s. However, Crosbie's statement goes on to add that this Richard Cantillon is now deceased. It seems likely that this Richard Cantillon was the son of Thomas Cantillon, that he died between 1650–1653 and that he was the great grandfather of the economist.

What happened to the Cantillon family after the Cromwellian forfeiture of their estates in the 1650s? Did they emigrate, were they transplanted or did they stay in Kerry as tenant farmers?

The Civil Survey Volume IV, 1654, for County Limerick incorporates a section on Clanmaurice Barony, Co. Kerry. There is no mention of the Cantillons either in Clanmaurice or Limerick.

Similarly the Census of Population 1659¹⁷, which included the names of most of the well established Irish families, makes no mention of the Cantillons.

On the other hand a manuscript in Trinity College indicates that in 1681 there was a Richard Cantillon living in the Barony of Clanmaurice:

"wee the undernamed doe hereby consent to pay our proportion of such summs of money as shall be though sufficient to bee raised in the parrishe of Killurie, Ratoo,

and Ballihige, towards the Building of the Chapplle or anie other parte of the parrish church of Killurie, as shall bee though meete by anie two, three or more of us provided the said sum shall not exceede ten pounds sterling. Witness our hands this 27th of April 81."¹⁸ This document includes the signature of Ric. Cantillon.

On the 27th of July 1689, a Richard Cantillon is among a number of Kerry men appointed by James II as Commissioner for the Militia of Array.¹⁹

It is possible that the Richard Cantillon mentioned in these two documents was the father of the economist.

There are a number of other pieces of evidence that indicate that the family was Irish based. The O'Connell manuscript discussed the family as if it was based in Ireland—events that took place outside the country are mentioned specifically as such. For example, Daniel Arthur is described as being based in London and Paris; the Chevalier Richard Cantillon is noted as being a banker in Paris and Captain James is cited as being an officer in Ro(o)th's Regiment stationed in France. London is given as the location of the economist's marriage.

The rest of the narrative seems to deal with people based in Kerry and Limerick. People such as Sir Thomas Crosbie and Phillip Cantillon of Ballyphilip were, as we know from contemporary documents, located in Kerry and Limerick. The economist's brother Thomas also seems to have remained in Ireland.

A document in the Registry of Deeds Office confirms that there was a Thomas Cantillon of Rathmorrell leasing lands in Ballyhanrigane—a place near Ballyheigue—in 1703.²⁰

This document is a copy of a Memorial confirming a lease for lives of lands in Ballyhanrigane, Ardculin, Knockinane, Minomore, Glaunbony and Monerowe, the parish of Rathow, Barony of Clanmorris between Henry Stoughton of Rathow and Captain Thomas Cantillon of Ballyhanrigane. The lease for lives is based on the lives of Captain Thomas Cantillon, his wife Elizabeth and Thomas Cantillon Junior of *Rathmorrell*. This lease was drawn up in 1703, was confirmed by this deed on the 2nd day of February 1712, and registered on the 5th of August 1714. The rent of the land was £50 sterling a year.

The inclusion of Thomas Cantillon Junior of Rathmorrell in the lease leads me to believe that the deed concerns the brother (Captain Thomas) and nephew (Thomas Junior) of the economist. Rathmorrell Castle was according to a manuscript in the Royal Irish Academy, the residence of the "chieftains of D. Cantillon."²¹

There is little doubt in my mind that Cantillon's parents were Irish and the O'Connell manuscript helps confirm the impression that the economist was born in Ireland. In a legal brief published on behalf of Richard Cantillon in Paris it is contended that Cantillon was "Irlandois d'Origine,"²² while Freron states in the *L'Année Littéraire* that Cantillon was Irish²³.

Unfortunately, notwithstanding the new information obtained on his family Cantillon's date of birth still proves to be elusive. As Betham confused Cantillon's parents it may be argued that the date of birth he gives of the 16th of March 1697 is incorrect. This date is apparently based on a Terry Manuscript that Betham saw

in the British Library. Unfortunately, I have been unable to find this Terry manuscript in the British Library and so cannot comment on its authenticity.

On the other hand there is no evidence to indicate that he was born in 1680, another date that commentators have taken. In the hope that new documentation will become available which will give precise details on Cantillon's age I do not intend to opt for either date.

What we do know is that Richard Cantillon arrived in Paris in 1714 to start his French career as a banker. But prior to dealing with this I would like, while on the subject of his family background, to clear up some mistakes that have been made about his wife Mary Anne O'Mahony.

Cantillon married Mary Anne O'Mahony, daughter of Count Daniel O'Mahony, the hero of the battle of Cremona, in 1722. Mary Anne was born on the 19th of October 1701 and was the daughter of Cecily Weld and not Charlotte Bulkeley as Higgs and other commentators have supposed.

Charlotte Bulkeley was the widow of Charles O'Brien, Lord Clare, who had been killed at Ramillies. She was the sister-in-law of James Fitzjames, the Duke of Berwick, Marshal of France and the "Fils naturel" of James II.

Charlotte Bulkeley, Lady Clare married Daniel O'Mahony 1712 at a wedding that was well attended by the Stuart court in in exile. C. Townsend-Wilson, in his life of the Duke of Berwick, writes of the wedding:

"No doubt the happy couple were satisfied but the wedding must have been gloomy; for Mary Beatrice grieved in solitude; and whenever James III showed his face, red from the small pox, not even loyalty could prevent the flight of startled grand dames."

Daniel O'Mahony was killed in a military campaign shortly after his wedding. Richard Cantillon probably met his future wife when she was as young as fourteen for a document in the Minutier Central shows the Cantillon bank being appointed by Father James O'Mahony, a brother of Daniel and guardian of his children, to act on behalf of the O'Mahony children.²⁴

Thus, Cantillon married into a Irish military family that was well connected with both the Stuart and French courts. His wife Mary Anne obviously wished to maintain this militaristic tradition and connection with the Bulkeley family as she married Count Francois Bulkeley (1686–1751), a Lieutenant General in the French army and her stepmother's brother in 1735:

Mary Anne O'Mahony's second marriage caused a certain amount of adverse comment as may be gleaned from the Denbigh papers December 11, 1736:

"The marriage of Madame de Cantillon was announced two months ago; it took place very secretly in England; even Mr. de Chavigny did not know about it . . . she has given birth to a daughter and has left for England calling herself Madame de Bulkeley, in this matter, I believe, along with her friends, that she has done wrong, because this change of state may embarrass her in the affairs that she has to finish in that country and what is even madder is that her husband wished, contrary to the views of everybody, to follow her, and I believe him to be in London at present".²⁵

Nothing is known of the daughter of this marriage by Mary Anne had a son Henry Bulkeley who was born in 1738.

Through her marriage to Richard Cantillon she had a daughter, Henrietta, who was born in 1728 and it was to this daughter that Cantillon left his estate. Henrietta married William Matthias Stafford, Earl of Stafford, in 1743 at the age of fifteen. He died in 1751 as did her mother Mary Anne Mahony/Cantillon/Bulkeley. She later married Lord Farnham by whom she had a daughter Lady Henrietta Maxwell who in turn married Denis Daly of Dunsandle, County Galway. Thus, the Cantillon line eventually returned to Ireland.

Cantillon and John Law

Richard Cantillon was in Paris as early as August 1714, despite the statement in his Memoire against the Carol brothers that he came to settle in France in 1716.

A document signed by Cantillon himself shows him leasing a carriage and horses in Paris on August 11, 1714.²⁶ With his mother's uncle, Daniel Arthur, engaged in banking operations in both London and Paris and his first cousin once removed, the Chevalier Richard Cantillon, already well established in Paris, the economist had an immediate entry into banking. By September 1714 the Chevalier gave Richard Cantillon junior, as he was known till the death of the Chevalier, power of attorney to manage the affairs of his bank at the rue St. Honore in his absence.²⁷ By February 1716, Richard Cantillon was in a position to purchase the banking business of the Chevalier and in return offer him a life annuity of 3,000 livres tournois per year.^{28 29}

But even before 1716 Cantillon "Junior" seems to have had a dominant role to play in the Bank of Richard Cantillon and Junior. A document, referring to a transaction that took place in May 1715, makes this clear.

This document describes a transaction involving Lord Carnarvon, Lord Bolingbroke, a banker called Comparant and Richard Cantillon junior. Lord Carnarvon issued a bill of exchange to Lord Bolingbroke for £30,000. The bill was drawn on Mr. Comparant in Paris.³⁰ But in the "financial disorder of the time" Comparant was unable to meet the bill in full. Comparant paid some of the money and issued the rest to Bolingbroke in the form of IOUs payable by Cantillon. The bill was endorsed over to Cantillon who wrote to Carnarvon, asking for payment of the bill in Bank of England notes. The bill of exchange was payable the 20th of May 1715.

The fact that a major politician such as Bolingbroke was willing to hand over a bill of exchange valued at £20,000 to Richard Cantillon "junior" indicates that Cantillon must have had a particularly good credit rating in Parisian banking circles. It also makes me very skeptical of the 1697 date of birth that Betham attributes to Cantillon. Would Bolingbroke have handed over a bill worth £20,000 sterling to an eighteen year old banker who had only arrived in Paris ten months previously? Surely not.

Cantillon, after the death of the Chevalier in 1717, continued the business of acting as banker for the Stuart Court in exile as well as dealing on behalf of British and Irish emigres living and passing through Paris. The Cantillon bank dealt with literary figures such as Alexander Pope and Matthew Prior, politicians such as Bolingbroke and Irish Wild Geese ranging from soldiers to traders, from priests to court mistresses.

However, to economists, his most fascinating connection must have been with John Law.

Through their writing one can tag Law as an 18th Century Keynesian and Cantillon as a refined monetarist. Law was a believer in increasing the money supply in order to promote increases in output in a stagnant French economy. Cantillon was more cautious recognising the effects increases in the money supply would have on prices and the balance of payments when output was unresponsive to increases in demand.

Though holding different views on the role of money in the economy they were both adventurers. Given their Scottish and Irish backgrounds and their adventurer approach in living one would have expected Law and Cantillon to have been closely associated.

Up to now the only link between Cantillon and Law has been the alleged conversation between the two written by Grimm.³¹ Grimm reports Law as having said to Cantillon, "If we were in England we would have to strike a deal and settle matters, but as we are in France, I can send you this evening to the Bastille, if you do not give me your word to leave the kingdom within twenty four hours."

Cantillon is alleged to have replied "Hold on, I will not go and I will make your system succeed." Cantillon, according to Grimm, lent support to Law's system and made a fortune out of his operations but decided to leave France as he distrusted Law. His decision to leave is confirmed by Cantillon's lawyer, Maitre Cochin, who reports the economist as locking up all his papers in a strongbox which he left in safekeeping with the English Benedictines, forming a "commandite" company with Loftus and departing to Italy to shelter in safety "from the financial storm that he could see developing."³²

A document in the Minutier Central of the Archives Nationales in Paris confirms the link-up between Cantillon and Law. In this Cantillon gives power of attorney to Edmund Loftus to run his business in his absence:

" . . . and as well the said Mr. Cantillon grants power of attorney to the said Loftus that he may sign the articles of association establishing a company to be formed between Mr. Law director of the West Indies Company, Mr. Joseph Edward Gage, an English gentleman, and the said Richard Cantillon, the purpose of the said company to be the establishment of a settlement in the Mississippi Colony and this being agreed that no private property is to be committed to it by the present agreement"³³

A further document between Cantillon and Loftus, dated the 23rd of August 1719, informs us that the draft articles of association of this company of Law, Gage and Cantillon were drawn up by private treaty on the 19th of November 1718.³⁴

These documents are fascinating both to Law and Cantillon scholars on a number of counts. In the first place they indicate that Law and Cantillon were working actively together on a Mississippi related project in 1718/1719. Thus, despite Cantillon's supposed distrust of the Scotsman he was still prepared to remain linked with Law through this company.

In the second place they indicate that Cantillon must, by this stage, have already made a fortune. John Law was, with the consent of the Regent, in an extremely powerful position in France during this period. He was to all intents and purposes the Prime Minister of the day and because of the initial success of the system the most popular man in France.

Obviously the people he was involved with as business partners were rich and influential. As further proof of this we have only to look at the career of the third man in the triumvirate mentioned in this document of July 1719, Joseph Gage. Joseph Edward Gage made such a fortune out of the early stages of the Mississippi Scheme that he attempted to purchase the Kingdom of Poland from its King, Augustus. When Augustus declined the offer Gage, undeterred, attempted to buy the island of Sardinia. Gage refused to sell his Mississippi shares and was ruined by the "Great Crash" of 1720.

The reluctance to sell shares on the part of Gage and other members of his circle and indeed their enthusiasm to borrow for further speculation were instrumental in making a second fortune for Cantillon, a fortune which involved him in litigation for the rest of his life.

In March 1720, Cantillon's bank lent sizeable sums of money to people like Gage, his wife, Lady Mary Herbert, and the Carroll brothers, John and Remy. These borrowers later alleged that Cantillon charged usurious rates of interest, a charge which Cantillon refuted asserting that they confused usury with foreign exchange transaction charges. They also alleged that Cantillon immediately sold the shares he obliged them to offer as collateral for their borrowings. If this was the case then Cantillon was lending them their own money and charging them up to 55 % for the privilege. Furthermore it was alleged that Cantillon had transferred the legal liability of the operations of the bank to his agent, John Hughes, and his four year old nephew, conveniently named, Richard Cantillon.

Cantillon's predictions that the System would crash were proved correct and if, as alleged, he sold the shares of the bank's clients in March 1720 he would have been able to buy them back at a very low price on the maturity of the loans. As the shares were not numbered as the bank kept a "floating stock" nobody was able to prove the charge against Cantillon.

The collapse of the System impoverished his debtors whom Cantillon pursued to repay the money he had lent them!

It is hoped that further research in both London and Paris will reveal more details on the connections between Law and Cantillon. The documents mentioned above indicate that Law and Cantillon were involved in Mississippi-related schemes at the very start of the System.

Cantillon and the Monetary Approach to the Balance of Payments

The monetary approach to the balance of payments (MAB) has usually been traced back by economists to David Hume's essays "Of Money" and "Of The Balance of Trade" published in 1752.

J. R. McCulloch states when discussing Cantillon's *Analysis of Trade*, "The author adopts several of the views of Hume whose Political Essays were published in 1752".³⁵

Philip Cantillon, a relative of Richard, plagiarised the *Essai* and published a bowdlerised inferior edition of it in 1759 under the title "The Analysis of Trade, Commerce, Coin, Bullion, Banks and Foreign Exchanges . . . Taken chiefly from a Manuscript of a very ingenious Gentleman deceas'd, and adapted to the present Situation of our Trade and Commerce."

What is interesting in McCulloch's quotation is the reference to Hume. McCulloch obviously felt that Cantillon had the use of Hume's essays in front of him when writing his work. However, Philip Cantillon was copying from the *Essai* written around 1730, twenty two years before the publication of Hume's Political Discourses.

The alternative question immediately arises, did Hume have an opportunity to read the *Essai* in manuscript form prior to putting his thoughts together on the price specie flow mechanism.

Hayek, in *Prices and Production*, seems convinced that Hume had read the *Essai* in manuscript form. "Better known is the somewhat shorter exposition of the same idea which David Hume gave a little later in a famous passage which so closely resemble the works of Cantillon that it is hard to believe that he had not seen one of these manuscripts of the *Essai* which are known to have been in private circulation at the time when the Discourses are written."³⁶

However, Hayek had no proof to support the assertion. He is correct in stating that manuscript copies of the *Essai* were available prior to 1755.³⁷ Malachy Postlethwayt quoted from the *Essai* in 1749 (without acknowledgement to Cantillon) in "A dissertation on the Plan, Use and Importance of the Universal Dictionary of Trade and Commerce . . . translated from the French of Monsieur Savary . . .". Fanfani asserts that Hume learnt of Cantillon's ideas through Postlethwayt but unfortunately gives no evidence to support his assertion.

However, even if Hume did read Cantillon's *Essai* in manuscript form prior to writing the Political Discourses he obviously did not read the *Essai* in depth. If he had, his monetary theory would have been far more sophisticated than that

advanced in the Political Discourses. As it is, it seems to me that if an 18th Century writer is to be selected as the originator of the monetary approach to the balance of payments the title should be given to Cantillon rather than Hume.

It is contended that Cantillon's approach is closer to the MAB than that of Hume because the *Essai* contains:

(1) A detailed analysis of the factors influencing the demand for money. J. A. Frenkel and H. G. Johnson, two of the leading exponents of the MAB, recognise that it is the demand for money function that is the linchpin of this approach.

"The essential assumption of the monetary approach, like the related quantity theory of money according to Friedman, is that there exists an aggregate demand function for money that is a function of a relatively small number of aggregate economic variables."³⁸

(2) a more eclectic adjustment process than the Humean price specie flow mechanism. This is mainly due to Cantillon's recognition of the distinction between traded and non-traded goods.

Cantillon, unlike Hume, spent a considerable amount of time investigating the factors influencing the demand for money and incorporated a cash balance effect as well as a relative price effect in his analysis of the adjustment process arising from an excessive expansion of the money supply.

Cantillon and the Demand for Money

Cantillon investigated in detail the factors influencing the demand for money, specifically recognising that changes in the velocity of circulation of money were capable of influencing economic activity just as much as a change in the money supply.

Cantillon was not the first author to introduce the velocity of circulation into monetary theory. Sir William Petty and John Locke both mentioned it.³⁹

In Chapter 5 of *Verbum Sapienti* (1665) Petty deals with money and how much is necessary to drive the trade of the nation. He specifically recognises that payment practices influence the demand for money.

"... If the revolutions were in such short circles, viz. weekly, as happens among poorer artizans and labourers, who receive and pay every Saturday, then 40/52 parts of 1 million of money would answer those ends; but if the circles be quarterly, according to our custom of paying rent, and gathering taxes, then 10 millions were requisite."⁴⁰

Locke recognised that there was some proportional relationship between money and trading activity "but what proportion that is, is hard to determine because it depends not barely on the quantity of money, but the quickness of its circulation."⁴¹

Holtrop points out that Locke implicitly understood the role that a change in the velocity of circulation would have on economic activity. He shows Locke's line of reasoning moving from a forced reduction in the interest rate to an increased

demand for cash balances which implies a smaller velocity of circulation. This scarcity of money will increase the value of money.

But whereas Petty and Locke only touch on the factors influencing the velocity of circulation Cantillon gives a systematic analysis of the factors influencing velocity in chapters 3 to 5 of Book II. The titles of these chapters indicate his keen interest in this area:

Of the Circulation of Money (Chapter 3)

Further Reflections on the Rapidity or Slowness of the Circulation of Hard Money in a State (Chapter 5)

Cantillon links the demand for money to income and payment practices.

As "land is the source of matter from whence all wealth is produced"⁴² the demand for money is related directly to agricultural activity. Agricultural income consists of, in his terminology, three rents each equal to one third of the produce of the land. They are:

- (1) The rent needed to pay the landlord for the use of the land
- (2) The rent needed to pay the farmer's maintenance and to cover the cost of hiring labour to work the farm.
- (3) The rent that makes up the farmer's profit.

But he quickly modifies this "When I stated that for the Country circulation there is needed a quantity of money often equal in value to half the produce of the land, this is a minimum; and in order that the country circulation should be easily conducted I will suppose that the ready cash which conducts the circulation of the three rents, is equal in value to two of these rents, or two thirds of the produce of the land."⁴³

This analysis has so far been carried out on the assumption that the payments requiring the use of money are made out but once a year. But if the time interval for payments is reduced, if for example payments are made on a quarterly basis, the "rapidity of circulation" of money is increased and less money is required for transactions purposes. "The proportion of the amount of money needed for circulation in a state . . . may be greater or less according to the mode of living and the rapidity of payments."⁴⁴

Making allowance for these he concludes "the money circulating in a State is equal in value to the ninth part of all the annual produce of the soil."

Cantillon notes that this estimate is close to Petty's view that the money in circulation is equal to one tenth the produce of the soil. But he goes on to add that he prefers to compare the money in circulation to landlords rents which are easily ascertainable rather than to total agricultural output, the value of which, Cantillon believed to be more difficult to ascertain because of fluctuations in prices and the amount of agricultural activity involving barter transactions.⁴⁵

He recognizes the role of commercial credits in reducing the demand for money "these exchanges by valuation seem to economise much cash in circulation, or

at least to accelerate its movement It is not without reason that it is commonly said commercial credit makes money less scarce."⁴⁶

While payment practices, commercial credits and paper money may speed up the velocity of circulation of money Cantillon cites a number of factors which may retard the velocity of circulation such as:

- (1) Urbanisation—the growth of towns and cities increases the demand for money as payments have to be made with money as against payments in kind in rural areas.
- (2) Hoarding—"Many miserly and timid people bury and hoard cash for considerable periods".⁴⁷
- (3) Money held for precautionary purposes—"Many Landowners, entrepreneurs and others always keep some cash in their pockets or safes against unforeseen emergencies and not to be run out of money."⁴⁸

Cantillon, as may be seen from the above, had a very comprehensive approach to analysing the demand for money. He has income, albeit agricultural income, as a key variable influencing the demand for money. He recognises the role of payment practices, media of exchange and urbanisation in influencing the demand for money. Like Keynes he has a precautionary motive influencing the demand for money. The inclusion of hoarding as a factor influencing the demand for money indicates that he recognised that money was held as an asset because of uncertain expectations about the future.⁴⁹

In discussing the effect of changes in the money supply on interest rates Cantillon is closer to Friedman than Keynes.

"It is a common idea, received of all those who have written on trade, that the increased quantity of currency in a state brings down the price of interest there This idea is not always true or accurate Plenty or scarcity of money in a state always raises or lowers the price of everything in bargaining without any necessary connection with the rate of interest, which may very well be high in states where there is plenty of money and low in those where money is scarcer: high where everything is dear and low where everything is cheap: high in London, low in Genoa."⁵⁰

His reasoning is closely paralleled in Friedman's AEA Presidential Address on the role of Monetary Policy:

"As an empirical matter, low interest rates are a sign that monetary policy has been tight—in the sense that the quantity of money has grown slowly: high interest rates are a sign that monetary policy has been easy—in the sense that the quantity of money has grown rapidly. The broadest facts of experience run in precisely the opposite direction from that which the financial community and academic economists have all generally taken for granted."⁵¹

If the term speculation is widened to include foreign exchange speculation, one finds in the *Essai* the demand for money being influenced by leading and lagging activity by traders.⁵² The role of inflationary expectations is also recognised at a later stage as having an influence on the demand for money.⁵³

Cantillon analyses the demand for money in this detailed manner for he understands that “an acceleration of money in exchange is equivalent to an increase of actual money up to a point.”⁵⁴

Thus, like modern monetarists Cantillon has started his monetary theory by analysing the demand for money. Friedman would again be in agreement with the Ballyheigue man on this issue. “The theory is in the first instance a theory in the demand for money. It is not a theory of output, or of money income or of the price level. Any statement about these variables requires combining the quantity theory with some specifications about the conditions of supply of money”⁵⁵

The Adjustment Process

Dietrich Fausten has argued recently that the Humean price specie flow mechanism is not the intellectual forerunner of the MAB.⁵⁶ In Hume’s system an increase in the money supply causes a proportionate increase in prices making the exports of the country in which the money supply is expanding less competitive and imports more competitive. Exports are reduced and imports increased resulting in a balance of payments deficit. This deficit causes the money supply to contract so that balance of payments equilibrium is restored eventually.

The adjustment process of the MAB, on the other hand, operates through the cash balance effect. Perfect commodity arbitrage is assumed to that the “law of one price” prevails in goods markets. Thus it is contended that an increased money supply produces increased expenditure which produces an increased inflow of imports and a reduced flow of exports as exportables are diverted towards domestic consumption. The balance of payments deficit is seen as arising through the influence of excess cash balances on expenditure for exportables and importables rather than through prices rising relative to international prices.

Cantillon takes a more eclectic approach incorporating both a relative price effect and a cash balance effect.

Unlike Hume he does not argue that an increase in the money supply leads to a proportionate increase in prices:

“From all this I conclude that by doubling the quantity of money in a State the prices of products and merchandise are not always doubled. A river which runs and winds about in its bed will not flow with double the speed when the amount of its water is doubled.”⁵⁷

Again this point is re-emphasized shortly afterwards:

“I conclude that an increase of money circulating in a State always causes there an increase of consumption and a higher standard of expense. But the dearness caused by this money does not affect equally all kinds of products and merchandise, proportionably to the quantity of money”⁵⁸

He advances two reasons for this. The first reason relates to the different marginal propensities to save of the public. The new money holder may have a high marginal

propensity to save—and in the days of the gold/silver system this implied, in certain cases, taking the money out of circulation. The second reason advanced for suggesting a non-proportionality between changes in the money supply and changes in prices is the distinction he made between traded and non-traded goods.

Cantillon introduces this distinction by stating that “Market prices will rise more for certain things than for others however abundant the money may be. In England the price of meat might be tripled while the price of corn went up only one fourth.”⁵⁹

The reason for this is that corn is a traded good, that is, a good bought and sold over national frontiers whereas meat is a non-traded good. Corn could be freely imported into Britain but legislation prevented the importation of cattle.

“But what generally causes meat to become dearer in proportion than bread is that ordinarily the free import of foreign corn is permitted while the import of cattle is absolutely forbidden.”⁶⁰

The price of corn is therefore determined by the price prevailing on the international market plus transportation costs. Therefore an increase in the quantity of money will not cause any great increase in the price of corn. In the case of meat there will be a great impact because meat is a non-traded good, always assuming no great substitutability between meat and traded goods.

Cantillon emphasizes this distinction by taking other examples of non-traded goods. Timber becomes a non-traded good because its costs of transportation are so high, whereas foods such as butter, salads, milk and game become non-traded good because of their perishability.

As proof of this view of the difference between traded and nontraded good prices Cantillon writes “An ox weighing 800 pounds sells in London market for two or three ounces of silver, but commonly sells in London market for more than 40. Yet the bushel of flour does not sell in London for double the price in Poland.”⁶¹

The Publication of the Essay

Writing on the 1st of July 1755 Grimm noted:

“Nous avons depuis un mois un nouvel ouvrage sur le commerce, intitulé *Essai sur la nature du commerce en général*”⁶²

Grimm’s account indicates that the *Essai* was published at the start of June 1755. The mysteries which surrounded Cantillon’s life were now transferred to the book. Questions immediately arose. Why had it taken twenty one years from the death of the author to make its first appearance? Who had been instrumental in having it published? Why did it state that it was printed by Fletcher Gyles in Holborn (London) while the printing and woodcuts clearly indicated that it had been printed on the continent and Fletcher Gyles had himself died in 1741?

Where was the missing supplement mentioned so frequently by Cantillon in the first part of the *Essai*?

In manuscript 780 (Archives Nationales Paris) we are presented with a possible reason for the delayed publication of the *Essai*. The Marquis de Mirabeau writing about the *Essai*—some people would say plagiarizing the ideas of Cantillon—says that “it is time to give credit to whom it is due” but then goes on to add that he cannot give the name of the man who inspired him because “I have been assured that I would anger the family.”

But which members of the family? Cantillon’s wife, Mary Anne O’Mahony, had died, as we have seen in February 1751. His only child, Henrietta, was still alive when the *Essai* was published, though her husband by her first marriage, William Matthias Howard Stafford, had died in 1751.

One possibility is Charlotte Bulkeley. She may have felt that further publicity about Cantillon was undesirable due to the legal problems encountered by the family as a result of the Mississippi Company share dealings. She may have persuaded her stepdaughter not to allow publication of the book, and after Mary Anne’s death taken action herself to prevent publication. She died on October 29, 1753 and it is not implausible to suggest that the book found itself at a printer’s shortly after her death.

Due to censorship laws in France at the time it was common for books to be printed in France but to bear false printing locations such as London, Amsterdam, Brussels, etc. This is certainly the case with the *Essai*.

Emile Weller in the *Dictionnaire des Ouvrages Francois Portant des Fausses Indications des Lieux d’Impression et des Imprimeurs* gives Paris as the place of publication.

Contemporary evidence in the form of a manuscript written by Joseph Hémery in the Bibliothèque Nationale in Paris indicates that the *Essai* was published in Paris and that Barrois was the printer.⁶³

Hémery was appointed “Inspecteur Pour les Affaires De La Librairie” in 1748. From November 1750 he was obliged to present an account of all new publications together with the names of their authors and printers.

Hémery kept a notebook on all the books he consulted and in September 1755 he came across Richard Cantillon’s work, but it was not the *Essai* to which he referred!

On September 4, 1755 Hémery noted down in his Journal the following:

Conduite des Francois Par Rapport à la Nouvelle Ecosse Depuis Le Premier Établissement De Cette Colone Jusqu’à Nos Jours: Ouvrage où l’on expose la faiblesse des argumens dont ils se servent pour éluder la force du Traité d’Utrecht et pour justifier leur procédés illégitimes, dans une lettre à un Membre du Parlement. Traduite de l’Anglois. Avec des notes d’un Francois, dans lesquelles il disculpe sa nation des imputations dont on la charge et où en réfutant les parallogismes de l’auteur anglois, et ses fausses assertions, il établit peremptoirement les droits de la France sur ses Possessions qu’elle occupe dans l’Amerique septentrionale. Volume in 12 imprimé Barrois aux C’est feu M. Cantillon père de Madame de Stafford qui est auteur de cet ouvrage.

The Cantillon referred to is obviously Richard, the economist—father of the Countess of Stafford. However, the book referred to is not the *Essai* but a political tract: *Conduite des Francois*.

The most obvious explanation is that Hémery mixed up two books that were published around the same time. It is plausible to suppose that he had the *Essai* and the *Conduite des Francois* in front of him and he attached the author of the former to the title page description of the latter. If we accept this hypothesis then we may take this reference as proving that it was Barrois who printed the *Essai*.

The alternative hypothesis is that Cantillon not only wrote the *Essai* but also the *Conduite des Francois*. However, although the authorship of the *Conduite de Francois* is catalogued under “inconnu” in the *Bibliothèque Nationale* in Paris, the *Dictionary of National Biography* states that it was written by Thomas Jefferys and printed in London in 1754, being translated into French in 1755. The *Biographie General* attributes the translation and annotation of the *Conduite des Francois* to George-Marie Butel-Dumont.

The mystery thickens when one takes this line, as Butel-Dumont is also attributed as the translator of a number of economic works published during this period, including the *Essai Sur L'Etat Present du Commerce d'Angleterre* which was written by Josiah Tucker. The printer on the title page of this translation is Fletcher Gyles in Holborn!

This paper began with a murder and ends with a mystery. It is of course consistent with what one would expect given the complex character of Richard Cantillon. Unfortunately, I cannot give the full story at present though I am optimistic that further research in Dublin, London, and Paris will provide a more detailed account of Richard Cantillon, banker and economist.

Appendix A

The O'Connell Manuscript

Manuscript P 12/2A/209 Archives Department University College Dublin 82, St. Stephen's Green.

Hugh Cantoval¹, alias de Gandavilla a Norman name and village there, a knight by report as Gerald Cambrensis writeth, was left by Henry the second along with Robert Bernard in the government of Waterford with four hundred other knights as it is written in the history of the conquest of Ireland by William MacDermod from whom are descended the Cantillons otherwise called Coutouloons or Conthouloons; and the Condons and in the old writing of the Condons is found Canteloun which word is the same with the word Cantevilla putting the English or Norman word town for villa, Cantillons mostly now living in the countys of Kerry and Limbrick their mansion seat at Ballyheig in Kerry

Pursuant to your letter of the 15th September last I have lately received the genealogy that you wrote to me about, I find that Cantillons of Kerry were Strong-

bonians and undoubted gentlemen, and had in that country a large estate the best part of the Barroney of Clanmorrish and a more considerable estate near Killarney upon the river Lauin, made great alliances and for their personal bravery were knights of the field for the Earl of Desmond.

On the coming in of Cromwel Sir Richard Cantillon was very young and the only child then in the family, the prospect of his rise was greatly envied for which a design was formed against his life. Some friends rescued him from the danger and sent him to Leinster where he was well kept till he came of age, he then came to the county settled his affairs in Kerry went back and married the daughter of a Lawler² whose mother was daughter to the Lady Iveagh who was daughter to O'Morrough and her mother daughter to the great O'Kelley in Leinster whose mother was Daughter to an English Duke, whose mother was daughter to one of the Dauphins of France, the mother of the above Sir Richard was daughter to one John Stouk³ of Kerry commonly called Shane Darrigg, this John Stouk was married to O'Connor Kerry's Daughter and his own mother Daughter to the Lord Fitzmaurice Barron of Lixnaw in Kerry—Sir Richard died and left a son to enjoy his title and fortune whose name was Richard, he married Elenor Creagh daughter to Alderman James Creagh of Corke whose mother was daughter to Lord Roach, Sir Richard the second whose eldest son was called Thomas, said Thomas was called the Cantillon, he was married to Catherine Peerse Daughter to Patrick Peerse Aghamore, who was married to Collonele Hussies Daughter whose mother was Daughter to the great Fitzgerald of Castleisland in Kerry whose grandmother was daughter to the Earl of Desmond—after the death of Thomas his son Richard married in the County of Limerick to the great satisfaction of his friends to Bridget Cantillon, daughter to David Cantillon of Kilgobbin near Addare, the mother of the late Cantillon Thomas and of Richard Cantillon who was married in London.⁴

Another Brother of the first Thomas who was married to Frances Peerse sister to the foregoing Catherine whose son was banker in Paris and another son Captain James Cantillon in Rooths Regiment in France⁵. Ireland was subdued by the Strongbonians about the year 1171 in the reign of King Henry the Second. Hugh de Cantedavilla was chief champion to the said king on account of which he got an estate granted to him in every county in Ireland which in the different counties is called Farran an Cuntlunlig or Rarrin in Connluinig⁶.

Said High de Cantedavilla was general to Raymond Delagrose had several lieutenant generals under him Sir Hugh de Lacy and others. A sister to the foresaid Honora Lawlor was married to Bishop Crosbie whose son was Patrick father to the late Sir Thomas Crosbie⁷ of Ballyheig in the county Kerry, she had four daughters one married to MacClucoddy⁸ one McElligott one to Captain Callum and one to Captain Licett. Sir Richard of Kerry's second son his name was John, he was educated under the inspection of the Countess of Kildare and was sent up near Adare in the County of Limerick as agent maniger and receiver for her, his son was Philip Cantillon whose son David Cantillon of Kilgobbin was married to Joe Arthur sister to Sir Daniel Arthur of London and paris, so that Richard Cantillon eldest son

to Thomas Cantillon is the first Cantillon and Bridget Cantillon was three and three a kin⁹, and obliged to get a dispensation for their marriage, the said David Cantillon was father to Philip Cantillon of Ballyphilip¹⁰ who was married to Honora Rice daughter to James Rice esquire of Ballyneeting in the County of Limerick. He was high Sheriffe of the County Limerick and cousin german to Sir Stephen Rice, Lord Chief Barron of the Exchequer in Dublin. It may not be amiss to give a short account of John Darrigg Stack who had very large estates in Kerry¹¹.

Commentary on Appendix A

The author or date of this manuscript is unfortunately unknown. It is part of the O'Connell manuscripts held in the Archives Department, University College Dublin. The O'Connell family was connected with the Limerick Cantillons through the marriage of Maurice "Hunting Cap" O'Connell (1726–1825), uncle of Danile O'Connell, to Mary Cantillon daughter and co-heiress of Robert Cantillon of Ballyphilip, Co. Limerick. The marriage took place around 1758/59.

However, the manuscript seems to have been written prior to 1750. Despite the absence of a watermark on the paper the archivists in University College Dublin are quite certain that it is an 18th Century document. There are a number of clues which indicate that it was probably written prior to 1750. The manuscript refers to the late Sir Thomas Crosbie and the late Thomas Cantillon. The former died in 1730 and it is believed that Thomas Cantillon died in 1736. There is no mention of nieces or nephews of the economist or of Captain James Cantillon's son Thomas, a hero at the battle of Lauffelt in 1747. Consequently it is believed that it was written between 1736 and 1750.

The manuscript seems to be a copy of another document with the original document representing a mixture of written work and the oral tradition on the Cantillon family. The transcriber is obviously unfamiliar with gaelic spelling and also spells names such as Lawlor and Stack in different ways in the text.

The early part of the genealogy is inaccurate in dealing with Sir Richard Cantillon I and his alleged wife Honora Lawlor. There is also an inconsistency relating to the degree of kinship of the economist's parents.

However, as it moves through time the account of the Cantillon family becomes very accurate when dealing with the Chevalier Richard, Captain James, the economist's parents, Philip Cantillon of Ballyphilip and so on. As such it is a valuable contemporary 18th Century document on the Cantillon family and helps us to piece together the complicated interrelationships of the family with far greater precision.

NOTES

1. Joseph Hone, "Richard Cantillon, Economist-Biographical Note," *Economic Journal*, No. 213, LIV. (April 1944)

2. *Notice Historique*, "Genealogique et Biographique de la Famille De Cantillon Par le Chevalier O'S . . . , Gentilhomme Irlandais, Benard et Compagnie," (Paris, 1844.)
3. John Nagle, *Richard Cantillon of Ballyheigue, Studies*, (Dublin, March 1932.)
4. Public Records Office London, PROB 11, 684.
5. *Ibid.*
6. Mary O'Connell, daughter of Robert Cantillon of Ballyphilip, married Maurice "Hunting Cap" O'Connell around 1758.
7. Mss. 230, Gilbert Collection, Dublin City Library.
8. G. Antonetti, *Autour de Cantillon*, Monograph 29 (1968-69), "Mémoires de la Société pour l'Histoire du Droit et des Institutions des Anciens pays Bourguignons, Comtois et Romands," Faculty of Law and Political Science, Dijon.
9. BN Dossier Bleu 3889, Higgs quotes this manuscript on p. 365 (Higgs 1931) but spells Hawkins incorrectly as Hocking.
10. Dermot O'Connor was a well-known scholar of the first half of the 18th Century. He is perhaps principally remembered for his translation of Geoffrey Keating's *Foras Feasa ar Eirinn* which appeared in 1723. Manuscripts in Trinity College with Dermot O'Connor's signature conform to the signature of O'Connor on Manuscript 159.
11. Richard Hayes, *Biographical Dictionary of Irishmen in France*, *Studies* June 1942, p. 242.
12. *Ibid.*
13. *Ibid.*
14. M. A. Hickson, *Selections from Old Kerry Records* (London, 1874).
15. Public Records Office, Dublin, *Lodge's Records of the Rolls volume VI, Grants of Lands, Leases and Deeds in the Reign of King Charles*.
16. Crosbie Family Correspondance, Mss.20,600, National Library of Ireland.
17. *Census or Population 1659*, ed. by Seamus Pender (1939).
18. Crosbie of Ardfert Papers, Mss.3821/32, Manuscript room, Trinity College.
19. M. A. Hickson, *Selections*.
20. Deed No. 2779, Registry of Deeds Office, Dublin.
21. Royal Irish Academy Mss. 12 M 12, P.269 "Lines on Viewing What Once Was Rathmorrell Castle" together with a commentary from which the above statement is taken. The writer, one J. H. Stack of Listowel, mentions that Ballynoe House is owned by the Revd. A. Stoughton, no doubt a relative of the Henry Stoughton mentioned in footnote 20.
22. *Memoire Pour Richard Cantillon Contre Jean et Remi Carol*, BN Paris, Fm 2,740.
23. M. Freron, *L'Année Littéraire—Année 1755*, Vol. 5 (Amsterdam).
24. A.N. Min., *Etude LXVI*, 335, 18th February 1715.
25. *Historical Manuscripts Commission*. Volume 5. Denbigh Mss. p.120.
26. A.N. Min., *Etude I*, 258 August 11, 1714.
27. A.N. Min., *Etude LXVI*, 356 July 15, 1715.
28. A.N. Min., *Etude LXVI*, 358 February 17, 1716
29. *Almanach Royal*, between 1716-1717 the bank operated as Richard Cantillon & Junior, rue de l'Arbre Sec. In 1718 it traded as Richard Cantillon, rue de la Monnoye.
30. A.N. Min., *Etude LXVI*, 368 21st of March 1719.
31. *Correspondance Littéraire, Philosophique et Critique de Grimm et de Diderot depuis 1753 Jusqu'en 1790*. Nouv. ed (Paris, 1829) V.I, pp. 332-41.
32. *Mémoire pour Richard Cantillon Contre Jean et Remi Carol*. (Paris, 1730) Fol. Fm. 2740. (Bibliothèque Nationale p. 2.)
33. A.N. Min., *Etude LXVI*, 370, July 31, 1719.
34. A.N. Min., *Etude LXVI*, 370, August 23, 1719.
35. J. R. McCulloch, *The Literature of Political Economy*.
36. F. Von Hayek, *Prices and Production*, p.9.

37. INED Edition of the *Essai* (Paris 1952), Introduction by Amintore Fanfani.
38. J. A. Frenkel and H. G. Johnson, "The Monetary Approach to the Balance of Payments: Essential Concepts and Historical Origins," in the *Monetary Approach to the Balance of Payments*, ed. J. A. Frenkel and H. G. Johnson (1976).
39. For a more detailed treatment of Petty and Locke's arguments see M. W. Holtrop. "Theories of the Velocity of Circulation of Money in earlier Economic Literature," *Supplement to the Economic Journal* 1926-9, pp. 503-524.
40. *The Economic Writings of Sir William Petty*, ed. by Charles Hull, (New York, 1963).
41. John Locke, *Some Considerations of the Consequences of the Lowering of Interest and Raising the Value of Money In a Letter sent to a Member of Parliament 1691* (The Works of John Locke Vol. II London 1740) p.13.
42. *Ibid.* p. 2 (All page references are to the R.E.S. reprint of the *Essai*, edited by H. Higgs, London, 1931).
43. *Ibid.* p. 127.
44. *Ibid.*, p. 129.
45. From an estimate of the Bank of England's banknote issue of £750,000 given on page 307 Cantillon implies a British money supply of £7.5 million. As he holds that the money supply corresponds to about one ninth of total agricultural output (one third of the landlord's rent) his estimate for British GNP (based on agricultural output) was £67.5 million.
46. *Ibid.*, p. 141.
47. *Ibid.*, p. 147 (stressed again on p. 175).
48. *Ibid.*, p. 147.
49. He also recognised the speculative motive "if at London a person sells his South Sea stock . . . hoping that in short time he will be able to buy at a lower price stock in the same South Sea company, he always takes banknotes" (*Essai*, p. 315).
50. *Ibid.* p. 213.
51. Milton Friedman, *The Role of Monetary Policy*, reprinted in the *Optimum Quantity of Money*, (Macmillan 1969) p. 100-101.
52. *Ibid.*, p. 259.
53. *Ibid.*, p. 289.
54. *Ibid.*, p. 161.
55. M. Friedman, *The Quantity Theory of Money, A Restatement, Studies in the Quantity Theory of Money*, edited by Milton Friedman (Chicago 1956), p. 4. Given Friedman's admission in Post-War Trends in Monetary Theory and Policy (*National Banking Review*, Vol. 2 No. 1, September 1964) that "the reformulation of the quantity theory of money in a way has been much influenced by Keynesian liquidity analysis" it could be argued that Keynes would have agreed also with Cantillon.
56. Dietrich Fausten, "The Humean Origin of the Contemporary Monetary Approach to Balance of Payments," *Quarterly Journal of Economics* XCIII (November 1979), No. 4.
57. *Ibid.*, p. 177.
58. *Ibid.*, p. 181.
59. *Ibid.*, p. 179.
60. *Ibid.*, p. 173.
61. *Ibid.*, p. 179.
62. *Ibid.*, Op.Cit.
63. Joseph d'Hemery, *Journal de la Librairie*, B.N., Manuscrits Francais 22159, p. 131.
64. For further details on Hémery see Jean Louis and Maria Flandrin—*La Circulation du Livre Dans La Société, du 18e Siècle*, published in *Livre et Société dans la France du 18e siècle*, ed. by Francois Furet (1970).

APPENDIX NOTES

1. James Terry in his letter to Richard Cantillon confirmed that his first ancestor to come to Ireland was Hugh Cantillon. In his letter from Versailles, Terry goes on to add “. . . the first of your family that landed at the conquest with King Henry the Second was Hugh Cantillon.”
2. This is incorrect. Both Betham and Hickson show that it was Thomas Cantillon who married Honora Lawlor. Thomas Cantillon died in 1613 long before Cromwell's arrival in Ireland.
3. This seems to be a misspelling; later on the name is written as John Stack.
4. This is Richard Cantillon, the economist. The parentage given here confirms that presented in the Hawkins genealogy.
5. Richard, the Banker in Paris, is the Chevalier Richard. A.N. Min., Etude LXVI, 363 (30th August 1717) confirms that the Chevalier Richard and Captain James Cantillon were brothers. Thus, the account is very accurate here as it is on Captain James Cantillon's regiment. He was in Dorrington's Regiment which became Roth's Regiment in 1718.
6. This represents an attempt to reproduce the original Irish script (Farrin an Chonnluinigh) which the writer was obviously unfamiliar with. It shows that this manuscript was copied from some other document.
7. Sir Thomas Crosbie died in 1730 as a result of the exposure and fatigue he suffered when involved in the rescue of the Golden Lyon, a Danish East Indiaman driven ashore in Ballyheigue Bay. Silver bullion and coin carried by the ship were stored by Crosbie in a stone tower which was part of a feudal keep formerly held by the Cantillons. The silver was stolen from the keep in 1731 and a Thomas Cantillon was alleged to have masterminded the robbery (See Hickson, *Selections*.)
8. Conor McGillicuddy's (Carhuebeg County Kerry) first wife was Joan, daughter of John Crosbie, Bishop of Ardferf and Aghadoe (See the McGillicuddy Papers, ed. by W. Maziere Brady, London, 1867).
9. The relationship as given is three and four a kin rather than three and three a kin as stated. This inconsistency confirms that there is something wrong with the earlier part of the genealogy.
10. A Philip Cantillon, of Ballyphilip, is listed in the Book of Adjudications on July the 6th 1699—See J. G. Simms, “Irish Jacobites,” *Analectica Hibernia*, No. 22, 1960, p. 109. He died between 1699 and 1701 as his Will dated 1701 is listed in the Index to Limerick, Ardferf and Aghadoe Wills, *Index to Irish Wills*, Vol. 111, ed. by Gertrude Thrift (London 1913).
11. The last twenty four lines relate to the Stack family and are not of direct interest to the account on the Cantillon Family.

Richard Cantillon¹

Introduction and textual comments by Friedrich A. Hayek, translated by Micheál Ó Súilleabháin, Department of Economics of University College, Cork, written for Hella Hayek's 1931 German translation of Richard Cantillon's *Essai**

I

In economics, just as in other sciences, it is by no means an exceptional occurrence to find that, no sooner has a "new" doctrine made its mark, than earlier, completely forgotten writers are discovered who perceived those newly accepted ideas with brilliant insight in their own day and set them down in their writings. In our field Oresmius, Monchretien, Barbon, Rae, W. F. Lloyd, Cournot, Jennings, Longfield, and Gossen are just a few of the best-known instances of this kind. In scarcely any field, however, will one find a case similar to that of Cantillon's *Essai sur la nature du commerce en général*, which, having greatly influenced the molding of a science and fully articulated it for the first time, was at once entirely forgotten and remained in obscurity for roughly a century until, re-discovered by accident, its second emergence proved sensational. Other, no less exciting aspects were opened up by the research which led to this achievement. The contemporaries who witnessed the publication of this book in 1755 had but a vague and partly incorrect knowledge of its author, who had died twenty-one years previously, and yet even in its latent form as manuscript the work had exerted a subterranean influence which can only now be appreciated.

Quite apart from its thoroughly strange history, this work, as the now undisputed accomplishment of Richard Cantillon, who died in 1734, is of extraordinary interest in its own right. W. S. Jevons, who rediscovered the *Essai*, was scarcely exaggerating when he entitled it the "Cradle of Political Economy," the bicentenary of whose existence as an independent discipline we can therefore now celebrate. Outside of Germany the importance of the *Essai* is practically unquestioned. Why it is still rather unknown in this country and why a German translation needs to be justified can be explained by unpropitious circumstances, fully in keeping with the fortunes of the book, into which we shall enter in due course.

The rediscovery of Cantillon's *Essai* is due to the fact that it is one of the few works quoted by Adam Smith. In the eighth chapter of Book One of *The Wealth*

*All page numbers cited in this text for Cantillon's *Essai sur la nature du commerce en général* are to the original French version.

of Nations, Smith, without preliminary reference but rather presuming acquaintance on the part of his reader, suddenly adverts in his discussion of wages to

Cantillon, [who] seems, upon this account, to suppose that the lowest species of common labourers must everywhere earn at least double their own maintenance, in order that one with another they may be enabled to bring up two children; the labour of the wife, on account of her necessary attendance on the children, being supposed no more than sufficient to provide for herself. But one-half the children born, it is computed, die before the age of manhood. The poorest labourers, therefore, according to this account, must, one with another, attempt to rear at least four children, in order that two may have an equal chance of living to that age. But the necessary maintenance of four children, it is supposed, may be nearly equal to that of one man. The labour of an able-bodied slave, the same author adds, is computed to be worth double his maintenance; and that of the meanest, cannot be worth less than that of an able-bodied slave. Thus far at least it seems certain, that, in order to bring up a family, the labour of the husband and wife together must, even in the lowest species of common labour, be able to earn something more than what is precisely necessary for their own maintenance; but in what proportion, whether in that above mentioned, or in any other, I shall not take upon me to determine.²

The only economic treatise bearing the name Cantillon, to which one might have related that passage at the time, was a very mediocre publication, the full title of which was "An Analysis of Trade, Commerce, Coin, Bullion, Banks, and Foreign Exchange, Wherein the true Principles of this usefull Knowledge are fully but briefly laid down and explained, to give a clear idea of their happy consequences to Society when well regulated. Taken chiefly from a Manuscript of a very ingenious Gentleman deceas'd, and adapted to the present situation of our trade. By Philip Cantillon, Late of the City of London, Merchant. London, Printed for the Author and sold by . . . MDCCLIX."

That book, however, does not contain any passages to which Smith, in making these remarks, could have been referring. On the other hand, in contemporary French economic literature, particularly the writings of most of the Physiocrats, one could encounter references to a different source, an anonymous *Essai sur la nature du commerce en général*, commonly attributed to a de Cantillon, which does in fact (on page 43) contain the passage which was quite inaccurately reproduced by Smith. This work, which appeared in French in 1755 while purporting to be "Tranduit de l'Anglois," also bore the false imprint "A Londres, chez Fletcher Gyles, dans Holborn."³

The fact that the *Essai* was widely read can be deduced from the many quotations found in the French literature of the second half of the eighteenth century and a fortiori from the fact that the 1755 edition was followed by two further editions. The first of these is similar in format with smaller type, so that it comprises 432 pages (427 numbered) compared to the original 436 (430 numbered). The second occurs as a reprint in Volume Three of an anthology edited by Eleazar Mauvillon, father of the German Physiocrat Jakob Mauvillon, which is variously entitled "Discours Politiques," after Hume's "Political Discourses" in Volume

One, or "Les Intérêts de la France," after Goudar's tract in Volumes Four and Five.⁴ In addition, an Italian translation by F. Scottoni appeared in 1767.⁵

It was this French *Essai* which, while writers prior to Jevons's research continued to attribute it in error to Philip Cantillon, was held in high esteem among the Physiocrats and which Adam Smith got to know when he was introduced to that circle in 1765. The first of them to name Cantillon was Viktor Riquetti, Marquis de Mirabeau, as distinct from his famous son, Count Honoré Gabriel Mirabeau, generally known simply as Marquis Mirabeau. The reference to Cantillon occurs in his *Ami des Hommes*, which followed, in 1757, two years after Cantillon's *Essai*.⁶ It is of two-fold interest, for while it represents one of the most important sources for a biography of Cantillon, it also entails a singular story of its own, which will concern us later. For the moment let us reflect on a later remark of Mirabeau's concerning Cantillon, which throws light on his own relations with the other members of the Physiocratic school.

In the course of expressing his views on population, which formed the subject of "Ami des Hommes," Mirabeau wrote to Rousseau on July 30, 1767:

I derived my original and indeed my only views on this subject from Cantillon's *Essai sur la nature du commerce*, which I possessed in manuscript form for almost sixteen years Never did Goliath stride into battle with greater confidence than I, looking for a man who, I was told, had had the temerity to write on the margin of my book: "The child has been suckled on poor milk, the strength of his constitution often sets him right in the result, but he does not understand anything of the principles". My critic did not spare me but told me to my face that I had put the cart before the horse and that Cantillon as founder of political science was an ignoramus. Such slanderous words led me to look upon the man who uttered them as a fool, but the consideration that argument thrives upon contradiction induced me to hold my tongue. I broke off the discussion and by evening was fortunately in a position to revert to the question with a calm mind. Then it was that Goliath's head was split open.⁷

When Mirabeau wrote these lines he had, as we shall see, completely altered his earlier views and was transformed from being an admirer of Cantillon to being an equally enthusiastic follower of Quesnay, without ever having adequately understood either one or the other. He managed, in fact, in the continuation of the passage just quoted to impute to Cantillon the exact opposite of his expressed views, while Quesnay's assessment of Cantillon—for the context implies that it was Quesnay—can indeed be explained by the misleading formulation of Cantillon's views in Mirabeau's book. Apart from that, the derogatory remark came undoubtedly not from Quesnay but from Mirabeau himself.⁸ In any case the record indicates that it was the book inspired by Cantillon which sparked off Mirabeau's acquaintance with Quesnay, around which the Physiocratic school later developed.

However, a year before that discussion, which took place in 1757 about four months after the appearance of "Ami des Hommes," Quesnay himself had quoted with approval some passages from Cantillon's *Essai*, remarking that that author had properly grasped the basic truths. The occasion was an article entitled "Grains,"

which Quesnay provided for the first edition of d'Alembert and Diderot's *Encyclopédie Methodique*.⁹ J. C. V. de Gournay, who is acclaimed as the other great Physiocratic figure, published no independent work, but we know that he recommended "above all a thorough reading of Cantillon's *Essai*, an excellent though neglected work."¹⁰

In the twenty years from 1756 to 1776, when the Physiocratic school flourished, we find Cantillon mentioned again and again. Turgot linked him with Montesquieu, Hume, Quesnay, and Gournay as one of the great writers who had surpassed their predecessor Melon.¹¹ ¹² The *Essai* was known to Dupont de Nemours, Morellet, Mably, Graslin, and Savary.¹³ ¹⁴ As early as 1762 passages from the *Essai* on the relationship between gold and silver (pages 371–381) were being quoted in Johann Philip Graumann's *Gesammelte Briefe von dem Gelde*.¹⁵ James Steuart quoted from the distorted "Analysis of Trade" of Philip Cantillon.¹⁶ In his inadequately appreciated "Du Commerce et du Gouvernement," which appeared in the same year as Adam Smith's *Wealth of Nations*, Condillac described the *Essai* in laudatory tones as one of the best books on the circulation of money which he had come across and which he had taken as the point of departure for his own analysis.¹⁷ At this point the name of Cantillon disappeared all at once from the economic literature.¹⁸ The later classical writers, for whom it was convenient to associate the reference in Adam Smith with the inferior English publication of Philip Cantillon, appear—perhaps with the exception of Malthus—not to have known him. They would of course, have encountered substantial parts of his work in the pages of his plagiarizers, whom we shall come to later.

One seeks in vain for Cantillon's name even in Blanqui's history of economic thought and until 1870 one finds only spasmodic references to him, Ganilh being a case in point.¹⁹ Eugène Daire devoted some scattered footnotes to him in his edition of the Physiocrats, while Cantillon is once again correctly identified in Julius Kautz's 1860 account of political economy and its historical development as a "transitional link between the Mercantilists, the Physiocrats, and the Smithians, ranked among the actual founders of political economy particularly because of his originality and independence of comprehension and presentation."²⁰ At this juncture it is well to recall a point that has been lost sight of since the rediscovery of Cantillon, namely, the fact that Wilhelm Roscher always paid tribute to Cantillon's importance. Relatively few other early authors are as frequently mentioned in Roscher's "Foundations of Economics," while in his history of political economy he credits Cantillon's *Essai* with "containing in essentially perfected form many of the main traits and most important achievements of the Physiocrats."²¹ It is presumably due to Roscher's influence that Fr. von Sivers in his 1874 essay on "Turgot's Place in the History of Political Economy" offers a detailed appreciation of Cantillon, many of whose pronouncements he quotes with the utmost praise.²² Meanwhile, writing in France four years previously, Léonce de Lavergne, that fine historian of his country's eighteenth-century economic literature, had indeed

begun his review of the Physiocratic school by naming Cantillon and Gournay as its forerunners, saying in particular of Cantillon's *Essai* that "this book, though it was barely the size of a duodecimo volume, anticipated all the theories of the Economistes."²³

Notwithstanding the increasingly frequent references to Cantillon in the 1870's, the honor of recognizing the true stature of Cantillon and of assuring him his proper place in the history of economic thought must be reserved for W. St. Jevons. Jevons's essay on "Richard Cantillon and the Nationality of Political Economy," published in 1881 in the *Contemporary Review*, achieved recognition for Cantillon at least in the English and French-speaking countries, but above all it clarified the question of authorship and signposted the way for subsequent research concerning Cantillon.²⁴ Practically everything that we know about Cantillon is due either directly to Jevons or to the researches of Higgs, which he inspired. Suffice it to recall here his summing-up of Cantillon's achievement:

The *Essai* is far more than a mere essay or even collection of disconnected essays like those of Hume. It is a systematic and connected treatise, going over in a concise manner nearly the whole field of economics, with the exception of taxation. It is thus, more than any other book I know, the first treatise on economics. Sir William Petty's *Political Arithmetic* and his *Treatise of Taxes and Contributions* are wonderful books in their way, and at their time, but, compared with Cantillon's *Essai*, they are merely collections of casual hints. There were earlier English works of great merit, such as those of Vaughan, Locke, Child, Mun, etc., but these were either occasional essays and pamphlets, or else fragmentary treatises. Cantillon's essay is, more emphatically than any other single work, "the Cradle of Political Economy."²⁵

Jevon's essay opened the way for a torrent of writing on Cantillon. The *Dictionary of National Biography*, Palgrave's *Dictionary of Political Economy*, and a supplementary volume of *Nouveau Dictionnaire d'Economie Politique* devoted space to him.^{26 28} In the years with followed, J. K. Ingram, R. Zuckerkandl, and especially A. Espinas discussed him in their doctrinal histories.^{29 31} In the first edition of his *Principles of Economics*, Alfred Marshall made a widely noted remark about Cantillon to the effect that he "was very acute and in some respects much ahead of his time. But he seems to me wanting in solidity."³² More importance attaches, indeed, to the researches of Stefan Bauer and especially to those of Henry Higgs, who, following clues which Jevons had uncovered but was unable to pursue because of his sudden death, brought some very interesting facts about Cantillon and his work to light.³³ These appeared in 1891 in the second number of Volume One of the *Economic Journal*.³⁴

Through the initiative of Harvard University there appeared in the following year an additional reprint of the *Essai*, which, Palgrave's *Dictionary* tells us, had become "one of the rarest works of economic literature."³⁵ This edition, not quite a facsimile but as close to the original as could be achieved without creating special type, has also been out of print for years and it seems that few copies made their way to Germany.

The very favorable reaction to and admiration of Cantillon's *Essai* in England and France was by no means restricted to the small circle of his discoverers and biographers, and his status as at least one of the founders of our discipline is beyond dispute. One could adduce much evidence of this point: suffice it to recall that H. S. Foxwell associates the main stages in the development of political economy with Petty, Cantillon, Ricardo, and Jevons, while in recent years E. Cannan has affirmed that Jevons's enthusiasm for Cantillon was not in the least exaggerated.^{36 37} But even in France Cantillon is scarcely less appreciated, notwithstanding the initial resentment towards him which presumably followed when Jevons, in restoring him to prominence, advanced England's claim over that of France to being the home of political economy.³⁸ Take, for example, the attitude of Ch. Gide. In his history of economic doctrine, which he co-authored with Ch. Rist, and which really begins with the Physiocrats, Gide followed his fleeting reference to Cantillon with a footnote stating: "Cantillon, who had gone unmentioned for more than a century, has in recent years become very fashionable again, like many other newly discovered precursors. The influence on the Physiocrats which one ascribes to him is exaggerated."³⁹ However, in a contribution on French economics to Volume Two of Palgrave's *Dictionary*, Gide explicitly describes Cantillon's *Essai* as the first systematic treatment of political economy and adds: "in this work practically the entire subject matter of modern political economy is dealt with in a very lucid and definite manner."

In Germany, as we have seen, there were special circumstances which inhibited an equally rapid acceptance of Cantillon's status. At the time when the rediscovered *Essai* was being discussed in England and France, the leading German authority on French economics of the period in question, A. Oncken, was a particularly keen admirer of and expert on the Physiocratic school. Just as a good biographer must have a somewhat exaggerated liking for his subject, in Oncken's case his attachment to the Physiocrats seems to have entailed a certain bias towards the man who was represented to him, quite justifiably, as the actual founder of the Physiocratic doctrine.

For this reason and perhaps arising from his personal view of what constituted the main tasks of economics, Oncken unhesitatingly rejected this claim advanced on behalf of Cantillon, and when he later wrote his history of economic thought, a widely read standard German work on economics before Adam Smith, his verdict on Cantillon was so unfavorable that a serious interest in the latter may well have been ruled out in Germany.^{40 41} The relevant passage, which discredited Cantillon in the eyes of many German readers, is so characteristic of both Oncken's position and the basic understanding of economics, which led to Cantillon's being ignored in Germany, that it is worth quoting here. Oncken writes:

From all of that it may be concluded that, while both doctrines [those of Cantillon and the Physiocrats respectively] have certain points in common, there is too much missing to justify calling Cantillon "the father of Physiocracy" and hence the originator

of economics as a science. The latter claim founders especially by reason of the lack of a moral philosophical basis, such as suited Quesnay's as well as Smith's system. Cantillon was an acute thinker and was extraordinarily well educated for his time, but for all that he was a mere merchant, like North, Child, and later Ricardo. He was not the founder of a science.

In a different context Cantillon might well have been satisfied to be bracketed in this way with Ricardo, but, given the prevailing attitudes in German economic circles at the time, the verdict assured his subsequent neglect. Oncken's influence is reflected most clearly in the remark of a certain Mr. Oberföhrer to the effect that "it is really incomprehensible that such a rather mediocre and incoherent publication could be stamped as one of the most influential pre-Physiocratic works!"⁴²

In such a situation it could not matter much that individual researchers such as W. Lexis, F. J. Neumann, and—presumably influenced by the latter—O. von Zwiedineck-Südenhorst fully endorsed particular propositions of Cantillon.^{43 45} That applies even to J. Schumpeter, who, in his brilliant "Epochen der Dogmen- und Methodengeschichte," hit the nail on the head, when he wrote:

Pride of place is reserved, however, for Cantillon, whose *Essai* can be looked upon as the first systematic working of the field of economics. It bears the stamp of the scientific mind. The individual problems are permeated by unified explanatory principles and together go to make up a comprehensive analysis of great design. The narrow confines of earlier trains of thought are broken down. Rudimentary blunders are avoided, those arising from deficient skill in handling tools of analysis just as much as those resulting from an undue burden of philosophy.⁴⁶

Nonetheless, it is no exaggeration to say that Cantillon is known only by name to most German economists today. The astonishment evoked by my desire to bring out a German edition of his work bears eloquent testimony to this fact.

II

Concerning the contents of the *Essai*, not much needs to be said.⁴⁷ For initial guidance, the three parts into which the book falls, may be informally entitled "On Wealth or Production," "On Exchange," and "On International Trade" respectively. Beyond that, and without attempting to offer a coherent summary of Cantillon's thoughts, one may be permitted to draw the reader's attention to some characteristics of his method and some particularly noteworthy theories contained in his treatise.

To begin with, there is the very definite meaning which the author attaches to the words "nature" and "natural," the former occurring in the title itself. Incidentally, in terms of title and general range of subject matter the treatise has much in common with other works, that appeared around 1735, such as those of Melon and Dutot.^{48 49} In particular, Cantillon consistently uses the expression "natural" in the sense of a cause and effect relationship—in other words, as a scientific causal explanation—and as such it occurs about thirty times in the *Essai*. Closely related

to this is his conscious and unremitting pursuit of “pure theory,” of explanation of relationships divorced from value judgments, which is particularly remarkable for a writer of his time. For this reason he frequently breaks off a discourse with the remark that “this is outside my subject”—for example, when the question prompts itself as to whether prices could also be influenced by an attempt on the part of entrepreneurs to cheat their customers (page 70), or when he eschews discussion of the question as to whether a state is better off with a small but well-nourished population or with a large but badly-nourished one (page 113). Other instances are his refusal to enter into motives which could prompt ministers of state to debase the coinage (page 392) and, very conspicuously, when, adopting a modern attitude in place of the contemporary one, he considers the practical desirability of certain taxes beyond his terms of reference (page 210). Indeed, the main reason why Cantillon’s *Essai* influenced only a small, select group may lie in his single-minded desire to articulate relationships, to add neither reform proposals nor ethical considerations to his framework, but rather to explain soberly and free of all metaphysical speculation the status quo; added to this was his somewhat cumbersome French.

Within the confines of his theoretical analysis Cantillon wields its most important tool, the method of isolating abstraction, as we would call it today, with true virtuosity. He displays familiarity with the device of the *ceteris paribus* clause, as had indeed some other writers before him, with the device of the “isolated state” and the progression from monopoly to more complicated cases in explaining price formation (pages 60–61, 59, and 76 and 131 respectively). He repeatedly excludes the effects of accidental circumstances in order to avoid over-complicating an already complex problem (pages 112 and 350).

The best-known feature of the *Essai* is presumably the sentence with which the first chapter begins, and in which Cantillon’s basic tenet is presented in its most compressed form, namely, the relationship between wealth, “which is nothing but the maintenance, convenience, and superfluities of life,” and its twin and equal sources, land and labor. This entirely psychological concept of wealth, by far the most important though also most overlooked element in that famous sentence, is an extraordinary achievement on Cantillon’s part, and it is so decisive for his standpoint that a modern French scholar cannot be considered far wrong when he describes Cantillon as a precursor of the modern Hedonists.⁵⁰ Without necessarily being a party to what is, perhaps, a rather daring verdict, one does well to bear this definition in mind when we read Cantillon’s discussion of value and prices.

It is unnecessary to dwell here on the introductory Chapters II through VI of Part One, which deal with the formation and stratification of human society and the emergence of private property.⁵¹ Attention must be drawn, however, to the ensuing Chapters VII and VIII, which, together with Chapter XV of part One, contain Cantillon’s exceptionally interesting population and wage theory, which has provided a specific focus for numerous subsequent studies.⁵² His population

theory is of interest not only because, as Jevons suggested, it anticipates in a nutshell the core of Malthusian population theory, but because the relationship, in fact, goes deeper than that. The passage in Smith that appears to have triggered off Malthus's own research interest bears an almost literal similarity to the corresponding formulation in Cantillon's *Essai*.⁵³ In this connection Higgs reminds us—just to show how far, with a little imagination, Cantillon's influence can be pursued—that Malthus in turn inspired the revolutionary work of Darwin.⁵⁴

Cantillon's wage theory is integrally linked with his theory of value. The latter is a standard of living theory, which in turn evolves directly out of the population theory. That Cantillon devotes so much space to the wage theory reflects his belief that it holds the key to what Petty looked upon as the most important problem of political arithmetic, namely, the par or equation between labor and land, which is the foundation of Cantillon's cost theory of value. G. Pirou has summed up his assessment of this theory of value as follows:

In Cantillon we are confronted, for the first time in the history of economic doctrine, with a lucid, coherent, and well-constructed theory. The extent of its originality and novelty, compared with earlier theories in general and with Petty's theory in particular, can best be appreciated in terms of the following three aspects: (1) As regards the problem of *normal value*, Cantillon does not confine himself to casual or occasional remarks: he puts the question directly and openly and attempts to give a satisfactory answer. (2) In examining the disturbing factors that prevent the market price from agreeing with the normal value he strives in the most thorough and profound manner to attach rigorous scientific meaning to the concepts of supply and demand, and also to bare the mechanism by which variations in the quantity of money affect the price. (3) Finally and most importantly, Cantillon relates the two resulting theories to one another in the course of elucidating how, inhibiting factors notwithstanding, the deviation of market price from normal value is never very great, thanks to an economic force that tends incessantly to restore agreement. This viewpoint expressed by Cantillon is all the more remarkable because it is entirely devoid of providentialist or teleological content. It is no exaggeration to say that, in this respect, Cantillon is a precursor of the economic equilibrium theorists.⁵⁵

While endorsing the concluding point of Pirou's remarks as entirely justified, we would like to add briefly to it for fear of a possible misunderstanding. The achievement of Cantillon's value and price theory derives its significance first and foremost from the fact that, instead of being satisfied to establish some rules and formulae, say for the "normal" relationship between the value and price of different goods, he consistently attempts to show what forces and process are involved, according as the normal relationship is necessarily restored. Suffice it to refer, for example, to the process of market price formation, the second chapter of Part Two (page 155), which is directly reminiscent of the famous horse fair example of Böhm-Bawerk.

Before we proceed to the subsequent sections of the *Essai*, it is necessary to highlight a further point from the first part, which, besides showing us how rigorously scientific Cantillon's conceptual framework was, is particularly noteworthy

because it is the earliest exposition of a basic economic phenomenon, namely the role which he ascribes to the entrepreneur (Chap. XIII).⁵⁶ In Cantillon's view, which is also the modern one, an entrepreneur is anyone who is a risk-bearer and whose income consists not of ground rent or wages but of profit. Not only in this juxtaposition, but indeed in many other points also, we find Cantillon anticipating a classification of income groups which was later to become conventional. This is true, for example, of the recurrent distinction, based on English usage, between the three rents which the leaseholder must generate—the actual ground rent, which goes to the owner; the wages to cover his own sustenance and that of his laborers; and his entrepreneurial profit, to which Cantillon adds, as an extra source of income, the interest received on money lent.⁵⁷

The final chapter of Part One, which is devoted to the value of precious metals and the emergence of coinage, forms the basis for his development of the monetary theory which occupies most of Part Two and even extends into Part Three. This theory constitutes, without doubt, the supreme achievement of a man who was the greatest pre-classical figure in at least this field and whom the classical writers themselves in many instances not only failed to surpass but even failed to equal. In the present context it must suffice to highlight some salient points, a procedure which is now feasible, thanks to the existence of a detailed assessment in P. Harsin's fine history of monetary and financial doctrine in France from the sixteenth to the eighteenth century, as well as in other works to which the reader is referred.⁵⁸ In his monetary theory Cantillon was apparently influenced in many respects by John Law, whom, however, he never mentions. This is seen clearly in his attitude toward John Locke, with whom he comes to grips several times and whose conventional theory of the origin of money he rejects in common with Law; likewise he explicitly rejects Locke's argument that the value of precious metals is determined by social consent. Law, whose importance as a monetary theorist nowadays tends to be obscured by his errors, none of which Cantillon shares, was, however, clearly surpassed by the latter. Among the achievements which distinguish Cantillon from other founders of monetary theory, may be counted his criticism of Locke's naive quantity theory, in place of which he gives us a detailed account of the process by which an increase in the quantity of money successively affects the prices of different goods. This account is found in the magnificent sixth chapter of Part Two and has been justifiably described by Jevons as one of the most wonderful things in the book. No less remarkable is his account, elaborating on Petty's approach, of what determines the velocity of circulation of money, "where one finds unequivocally stated for the first time that the velocity of circulation of money is as important as its quantity in determining its value."⁵⁹ Equally outstanding are his description of the functioning of a dual currency, in the context of which he criticizes the measures taken by Newton at the time of the English coinage reform in 1717, and finally his doctrine concerning exchange rate, which, in Jevons's opinion has never, not even in Goschen's well-known book, been treated with more perspicuity and scientific accuracy.^{60 61}

The final two chapters of Part Two of the *Essai* also deserve attention, for they contain a rather well developed theory of interest, one which even Böhm-Bawerk, remarkably enough, overlooked; here the opinion that money begets interest is clearly refuted (an achievement for which Hume usually receives credit), and the effects of a temporary reduction in the rate of interest, brought about by an increase in the quantity of money, is accurately described. Following upon the discussion of exchange rates and dual currency, we find, finally, in Part Three a detailed description of the banking system, in which Cantillon explains, for example, the special circumstances which cause a banker to hold a cash reserve greater or less than the usual ten percent of his liabilities. With that we have covered the main points to which we wished to draw the reader's attention.

There is, however, a further point, which deserves to be singled out. In the first quarter of the *Essai* Cantillon repeatedly refers (on pages 9, 19, 25, 46, 50, 56 and 59) to an appendix in which are contained calculations, the results of which he used in the text. This appendix, which allegedly was seen together with the manuscript, is in none of the published versions and hence is lost. Its loss is regrettable, for it must have contained unique statistical data collected by Cantillon himself. It is, however, probable that Cantillon, having mentioned the appendix only in the Part One of his *Essai*, never succeeded in completing it and hence did not publish the work himself.

Finally, a brief word about Cantillon's place in the history of economic thought. We are not concerned here with the relatively unimportant question as to whether Cantillon was primarily a Mercantilist or a Physiocrat; indeed, by almost dominating the discussion, this question led many writers to miss the real significance of Cantillon. No reader of the *Essai* will fail to see that the basic ideas of the Physiocrats are to be found in Cantillon (see especially pages 9, 29 ff., 37 ff. and 78 ff.), and Quesnay himself has testified that he drew his inspiration mainly from Cantillon. Anyone interested in the relationship between Cantillon's views and those of the Physiocrats and the Mercantilists will find a detailed comparison in the already frequently quoted book by Legrand.⁶² Looking at it from a different point of view, it seems to me that Cantillon's importance derives directly from the fact that he stood apart from the schools. Like Petty before him, this gifted independent observer, enjoying an unsurpassed vantage point in the midst of the action, coordinated what he saw with the eyes of the born theoretician and was the first person who succeeded in penetrating and presenting to us almost the entire field which we now call economics.

Accordingly, Cantillon represents in my view one of the important stages, and in many respects perhaps even the primary stage, in the straight developmental path of knowledge, from which the disciples of the "schools" have always deviated in one way or the other. The Physiocrats and, like them, at least some of the later classical writers, were thus hindering rather than promoting progress, while the great strides were always made outside the schools and mostly in opposition to them. In terms of really original insights of permanent value to our discipline,

Cantillon offers us more than any other author writing before 1776, the year in which the works of Smith and Condillac appeared, and hence more than the Physiocrats, even though their presentation of the circular flow—which one could validly describe as a systemization of Cantillon's ideas—had greater visual impact and proved more influential for the time being. Whether one therefore calls Cantillon *the* founder of economic science or not, is a matter of little consequence. Determining the point of origin of a science always involves a high degree of arbitrary choice. The fact that we must rank him as one of the great scholars of our discipline will hopefully not be doubted by any reader of the *Essai*. The actual extent of his influence on the development of economic science is, of course, another question and one which is extremely difficult to answer. Before attempting to do so, let us record the little that is known of Cantillon's life and the history of his manuscript from the time of his death until its publication.

III

Knowing so little of the circumstances of Cantillon's life is by no means our greatest difficulty in seeking to convey what kind of person he was. Far more annoying is the fact that a large part of the traditional information concerning him can be shown to be unfounded. Hence, almost every literary effort devoted to him has proved ill-fated. Even otherwise scrupulously meticulous writers, when they came to write about Cantillon, were led into error and mis-statement. There was scarcely any aspect left for which several mutually exclusive claims did not prevail.⁶³

Higgs is the only really trustworthy source, and even the earlier accounts are dependable only so far as that they were endorsed by him. The fact that Cantillon's life, in spite of this, is still largely cloaked in darkness may be attributable partly to the not unusual propensity of people in his profession to shun the glare of publicity. Nevertheless, what we do know about Cantillon gives us a starting point, no matter how strange it is that Higgs, having searched through hundreds of contemporary memoirs and diaries, had to report that he could not find a single mention of Cantillon's name and that none of the writers who followed Higgs' lead in taking up the case of Cantillon succeeded in adding anything to our knowledge of his life.⁶⁴ Indeed, P. Harsin, one of the finest experts on French financial history of that period, has only recently expressed his astonishment that the French sources have nothing further to contribute.⁶⁵ It is scarcely necessary, therefore, to say that what follows is essentially a summary of already known facts.⁶⁶

A detailed account of the milieu in which Cantillon lived would, unfortunately, be out of place in the present context. A number of references to particularly informative and little-known works on the subject are given in the accompanying note.⁶⁷ The circumstances we have referred to serve also to justify the form which our account takes, for its purpose, in bringing together methodically the most important available information, is to offer a basis for further research.

Our earliest account of the book occurs in the well-known literary correspondence which Baron Friedrich Melchoir von Grimm, together with Diderot and others, conducted with princely houses in Germany and which was published a great many years later. Grimm wrote on July 1, 1755:

A month ago appeared a new work on Commerce entitled *Essai sur la Nature du Commerce en général* in a fairly large duodecimo volume. This book has not been translated from the English, as is stated with design upon the title page. It is a work originally composed in French by an Englishman, M. de Cantillon, a man of condition, who finished his days in Languedoc, where he had retired and had lived many years.⁶⁸

Grimm then gives a detailed account of the contents, which in modern print, amounts to almost six pages. In his next letter, fourteen days later, Grimm augments his report as follows:

M. de Cantillon, of whom I had the honor to speak to you in my last letter, mentions several times in his work on the nature of commerce another work, which he regards as supplementing the former and which contains, in particular, various ingenious and interesting calculations. This latter work, one is assured, has been lost and all efforts to recover it have proved unsuccessful. The admiration, which the first volume deserves, can serve only to increase our regret at the loss of the second.

A further fourteen days later, on August 1, Grimm finds it necessary to correct his account of Cantillon's person:

I was ill-informed concerning the person of M. de Cantillon, when I had the honor to write to you of his excellent work on Commerce. Cantillon, an Englishman and a man of intellect, as, indeed, his book proves him to be, established a bank in the time of the Regency, in Paris, where he had immense credit. In the early days of the system, Law summoned him to his presence and said to him: "If we were in England, we would have to negotiate with one another and come to some arrangement; in France, however, as you know, I can say to you that you will spend the night in the Bastille if you don't give me your word that you will have left the Kingdom within twice twenty-four hours." Cantillon thought for a moment and then replied: "Very well, I shall not go but shall help your system to success." Accordingly, he took a large amount of the paper, which he immediately placed with all the exchange brokers, and thus floated the loan. A few days later he set off for Holland with several millions. Some people assert that he was in good standing with the Princesse d'Auvergne. It is commonly said that he perished in a fire in his house in London in 1733. The fact is that the fire was extinguished easily enough and that they found Cantillon stabbed. The fire appears to have been raised to conceal the crime, and this affair gave rise to many rumors at the time.

This can be supplemented by the second contemporary account of the publication of the book, which is contained in the 1755 volume of Fréron's *Année littéraire*.⁶⁹ In the third letter, dated August 4, 1755, of Volume Five, the detailed account of the book begins, just as in Grimm's case, with the statement that the *Essai* was not really a translation:

It was written in French, and it is the English themselves who have translated it into their language from the original of M. de Cantillon. He was an Irishman who was for many years a Banker in Paris and died tragically in a fire here. A man of great intellect, he associated with people of the highest social standing and was a special friend of Lord Bolingbroke. It is not known through whom or how the manuscript came to be published or why its publication was delayed for twenty years. Neither is it known why the calculations, which several persons claim to have seen in manuscript form, were suppressed at the time of printing.

Fréron also had to correct his account of Cantillon. When the list of contents of the volume in question was being drawn up and the book of the late “fameux banquier” was being referred to, a note was appended to the effect that

it was incorrect to state that he died in a fire in Paris. He had returned to his native England in 1733 or 1734. Shortly afterwards he was robbed by a man-servant, who, to cover up his deed, set the house on fire. The latter was discovered, arrested and executed in London. M. Cantillon had married his daughter to my Lord Bulkeley, Lieutenant-General in the French Service, Chevalier des Ordres du Roi, brother of Madame la Maréchale de Berwick. Madame Bulkeley died at Paris six or seven years ago.

These partly contradictory statements, the corrected versions of which were themselves inaccurate, comprised practically our entire knowledge of Cantillon up to the time of Higgs's research. Even the two great French biographical dictionaries, the *Biographie Universelle* and the *Nouvelle Biographie Generale* simply reproduce these statements.⁷⁰ A reader conversant with the gossip of the time might have recalled a passage in the letters of Horace Walpole in which, under the date April 25, 1743, we read:

Lord Stafford is come over to marry Miss Cantillon, a vast fortune, of his own religion. She is the daughter of Cantillon, who was robbed and murdered by his cook some years ago, on which occasion the latter burned the house down. She is as ugly as he; but when she comes to Paris and wears a great deal of rouge, and has a separate apartment, who knows but she may be a beauty.⁷¹

In a footnote the editor of the letters comments that Cantillon was a Parisian wine merchant and banker, who was involved in the Mississippi company with Law and who later brought his riches to England and settled down there. In May 1734 (on May 14, to be exact) a number of his servants, led by the cook, plotted to murder him, knowing that he had substantial sums of money in the house. Having killed him, they set the house on fire, but the flames were easily extinguished and the stabbed body found. The cook fled by sea, while three of his accomplices were charged with murder but later acquitted. This account was apparently taken from contemporary weekly newspapers, as Jevons, who later tracked them down, was able to confirm.⁷² The marriage mentioned by Walpole is recorded in the genealogical reference books, which tell us that on July 8 or 26, 1743, Henrietta, the daughter of Richard (or Philip) Cantillon, a Parisian banker, married William Mathias, Earl of Stafford, and, following his premature death seven years later,

she married Robert (Maxwell), Baron (later Earl of) Farnham, on October 11, 1759, but died on August 30, 1761, at the age of 34 years.⁷³

The third contemporary account of Cantillon consists in the already quoted remarks of the elder Mirabeau in his famous *L'Ami des Hommes*, published in 1757, two years after the *Essai* appeared, and—as it later turned out—far more closely related to the latter work than Mirabeau himself would have led one to believe. In the very preface, Mirabeau refers to Cantillon's *Essai*, without naming it explicitly. With a view to excusing the rather unsystematic construction of his book, Mirabeau mentions a change of plan which had become necessary in the course of the work:

I began it in the form of a free commentary on an outstanding work which I possessed in manuscript form and intended to publish. Publication took place, however, before I had commenced the third section; this made me decide to alter the form of my project and to publish under my own name the scattered and hitherto abandoned fragments which I had committed to paper.⁷⁴

Subsequent remarks by Mirabeau in the course of his text indicate that it was Cantillon's *Essai* to which he had referred. Having quoted from Chapter XV of Part One of the *Essai*, he continues:

These words are taken from Cantillon's work, printed last year. He was uncontestedly the most competent man ever known in this field. His opus, which became submerged in the deluge of similar works brought on by present-day fashion, is but one-hundredth part of the entire work of that brilliant man which perished with him in a most extraordinary and tragic disaster. The opus is itself truncated, since the appendix, to which the author frequently referred and which contained all his calculations, is missing. He had translated the first part himself for the benefit of one of his friends, and on the basis of this manuscript it was printed more than twenty years after the death of the author.

He develops his basic principle in a series of chains of reasoning, so well interlocked as to prove inescapable. They should be looked at by those who dispute his principles. I would have had to repeat them in full or in part; but, on the one hand, I am not disposed to plagiarize, while, on the other, everything in the work is so interrelated, that no thought can be plucked out singly. At the same time, the apathy which led to such a peerless work being lost in the crowd may undoubtedly be attributed to its aridity as a piece of reading.⁷⁵

Mirabeau's protest that he was not disposed to plagiarize Cantillon was, indeed, not unwarranted. It would undoubtedly appear that at least the legal owners of Cantillon's manuscript at the time had reason to fear that this was precisely his intention. As is clear from his letter to Rousseau, which we quoted, Mirabeau had the manuscript in his possession for no less than sixteen years. When Alfred Stern, in his *Das Leben Mirabeaus*, drew attention to this point, he prompted Stefan Bauer, in the first instance, to enquire about Mirabeau's manuscripts in the National Archives in Paris, where he found in due course what he believed to be a copy of the manuscript of the *Essai*.⁷⁶ ⁷⁷ It was only when Henry Higgs carefully scrutinized the manuscripts ascribed to Cantillon that they proved to be not a true

copy but rather an abbreviated version of the *Essai*.⁷⁸ It contained several alterations, which were apparently calculated to hoodwink the reader as to the true authorship of the work, but it also carried a preface, from the title of which it appears to have been addressed to the Duke of Noailles and which, in Higgs's opinion, reflected all the characteristics of Mirabeau's style. From the complete version published by Higgs, we reproduce here the following passage in which Mirabeau presents what purports be his own work, in terms which bear a strong resemblance to those he used in respect of Cantillon in his *Ami des Hommes* and which we already quoted:

Kindly forgive the arid style of the *Essai*; convinced that, in treating of this subject, one can scarcely go far enough in suppressing one's imagination so as to proceed step by step, and at the same time lacking confidence in my ability to act accordingly, I went to the opposite extreme. May I add that this is but a short excerpt from a longer and complete treatise, but, having jettisoned the greater part in order to get finished, I have disrupted the continuity of the work. However, it had to be brief, and if there is any point, which you would wish to pursue in detail, you know the author.

In the text of the *Essai* that followed, the passages which were altered or dropped were predominantly those which would have betrayed an expert knowledge not to be expected from Mirabeau, while occasionally, as if to allay suspicion, some hint is given as to how the author acquired his information. The extent, if any, to which Mirabeau made use of this revised text is not known. That his motives, as Higgs suggests, were dishonorable can scarcely be doubted.

The second manuscript is perhaps more interesting. It is a closer copy of the first half of the *Essai* (extending to the beginning of Chapter VI in Part Two), which was written down apparently by one of Mirabeau's secretaries. A running commentary in the form of marginal notes, added by Mirabeau himself in the first part of this manuscript, evolved in time into the *Ami des Hommes*. After the appeal to Epicureans, which prefaces this work, and attached to which is the veiled reference to the manuscript of Cantillon's *Essai*, we now encounter some words in recognition and appreciation of the latter, in which, quite remarkably, the original reference to "M. Cantillon" is deleted and simply "*cet homme*" left standing. The following is a translation of part of this extensive passage, which Higgs printed in full:

It is now time to do justice to one who deserves it. Among the many works on industry and trade, which appeared in recent times, and many of which I have read with satisfaction, I sensed, though they contained many useful notions, a lack of precision of principle. At last there fell into my hands a rare manuscript, the only relic of the immense works of one of the ablest men Europe has ever produced. I should have named this man with pleasure [originally: 'This man is M. Cantillon'] and my debt to him is such, that I feel obliged to render him the service of handing down to posterity his name and some account of his industrious life, such, at any rate, as would bestow upon his work the authenticity which it deserves. However, a reading of his work suffices for that purpose. To pursue the other points would, I am assured, annoy his family.

Purely on the basis of this allegation, without investigating it and independently of its truth or otherwise, I shall desist. Even though I should think less of those who would take offense, for me the very possibility of offending someone was enough to restrain my pen, a sacred instrument in honest hands, but a poisoned dagger in the hands of one with deranged mind or corrupt heart.

Hence, I say simply that it is the work of one of the leading men of genius in trade in this century. Excessively active, his profound erudition embraced everything bearing on the subject. He foresaw the complete course of the famous system of Mr. Law, and, compelled by circumstances to take part in it, he quitted the theatre of this astonishing revolution, leaving his correspondent with orders in advance as to the different stages of the cycle which the catastrophe would run. This fact is not lightly stated. Its details have come out before one of the leading tribunals of Europe. Men like him knew how to keep clear of the crash of this colossal and frail edifice and to make good pickings from its ruins. It was easy for him to profit from the financial crisis which broke out almost simultaneously in nearly the whole of Europe, in Venice, Amsterdam and England. But, a genius at heart as well as in mind, he always looked upon gold as a slave and made wealth subservient to his tastes and curiosity, without thinking of acquiring it till there came to him some new fancy or some occasion to follow his leaning to generosity. Given over to occasional passions like all ardent souls, his chief were always independence and liberty. Cosmopolitan, or rather equally a citizen everywhere, he had houses in seven of the principal cities of Europe and the least knowledge to acquire or calculation to verify made him cross the Continent from one end to another. One of his friends told me that he found him one day at home in Paris in his dressing gown with Livy on his desk. "I am going", he said, "to make a little trip. There has always been a blunder as to the value of the coins with which the Romans ransomed their city from the Gauls. No matter whether the opinion is true or false, the interpreters are asses, and I am going to get some definite views on the matter. One of these coins is in the collection of the Grand Duke and I am going to verify its weight and alloy". At this moment the horses arrived and he took leave of my friend to get into the coach. In these voyages he made certain of everything, got out of the carriage to question a labourer in the field, judged the quality of the soil, tasted it, drew up his notes, and an accountant whom he always took with him put them in order when they stopped for the night. A mass of precious manuscripts perished with him by a remarkable and deplorable catastrophe. This surviving sketch can only serve to increase our regret about the rest. This fragment came into my hands by a kind of theft subsequently announced by the person for whom the translation was made.⁷⁹

Mirabeau then goes on to say that he hesitated to publish the work because it lacked the supplement and, in addition, because "the author" (originally: "M. Cantillon") had first written it in his native language and then translated it, without exercising particular care, for the use of a friend, with the result that it was rather cumbersome in its phrasing. He had originally planned to revise the text but had to come to the conclusion that it is impossible "to lay a hand on the works of great men, when one is not at least on a par with them." Rather than confine himself to commenting on the text, he had subsumed it into his own work and, in doing so, altered the title, since there was already a surfeit of "Essais sur la commerce."

As the quotation from the preface to *Ami des Hommes* showed, Mirabeau's plan was frustrated, even before he had completed his task, by the prior publication

of the *Essai* by others. Even so, when *Ami des Hommes* finally appeared, purporting to be a completely independent work, it bore many traces of Cantillon's influence and Higgs tells us that the unpublished manuscripts contain further evidence of this influence.⁸⁰

Mirabeau was not the only person, however, who attempted to use the manuscript before the *Essai* was published. As Jevons pointed out, two English authors, M. Postlethwayt and the established monetary theorist J. Harris both unscrupulously plagiarized Cantillon following the appearance of the French edition.^{81 83} A few years later E. Cannan discovered that the same Postlethwayt had as early as 1751, that is four years before the publication of the *Essai*, transcribed long passages from it verbatim in the first volume of his *Universal Dictionary of Trade and Commerce*.^{84 85} In fact, a prospectus relating to the same Dictionary, which preceded it by two years, contains passages which are unequivocally taken from Cantillon's *Essai*.⁸⁶ We cannot say with certainty whether Postlethwayt had in hand the French translation or indeed the original English manuscript, which contemporaries assumed had perished with Cantillon. It was probably the latter, because, in the first place, it is known that the French manuscript was for many years in Mirabeau's possession; secondly, certain errors in the French text do not occur here; and, finally, because the "papers of a most gifted, deceased gentleman," from which Philip Cantillon's already mentioned "Analysis of Trade" was admittedly derived, can scarcely be anything else but the original English manuscript of the *Essai*, still in existence in 1759.⁸⁷

In addition to those persons for whom firm evidence exists, there were probably many more who knew the manuscript of the *Essai*, of which presumably several copies were available. This is supported at least by the statement of Fréron concerning a number of persons who claimed to have seen the appendix. It is only on the basis of what little we know about the circle in which Cantillon moved, that we can hazard a wild guess as to what subsequently became of the manuscript.

IV

We know as little about Cantillon's origins and person as we do about the fate of his writings. It is true that Jevons found the already cited accounts of his family in genealogical publications. However, on closer inspection their contents prove to be so much in conflict with established facts about Cantillon that it would be better to forego using them at all. The only thing certain is that the Cantillons were settled in Ireland for centuries and that several members of the family emigrated to France, at the latest in the company of James II, when, towards the end of the seventeenth century, the Stuarts were driven out of England. One Richard Cantillon, clearly not the economist but rather, according to the unreliable genealogy, his cousin, a wounded veteran of the Battle of the Boyne between the followers of James II and those of William of Orange in 1690, was established by at least 1705 as a banker in Paris and as such was a confidant of the large group of English

Catholics who gathered there round the son of James II, the "Old Pretender." Details of various business deals of this Richard Cantillon have been recounted by Higgs, in particular a not unproblematic case of a lottery run for the benefit of the emigrant Benedictines from Ireland.⁸⁸

The first reference to our own Richard Cantillon followed upon the death of his cousin on August 5, 1717. The latter had contracted debts far in excess of his assets, so that some of his creditors had to be satisfied, at first with twenty-five percent of their claims. But in March 1720 "M. Cantillon, who in the lifetime of the chevalier Cantillon was known by the name of Richard Cantillon junior, graciously offered to pay all the creditors of the deceased the three-fourths which were wanting to their satisfaction in full, though he was himself one of the creditors for a large amount; . . . and carried his offer out . . . being impelled thereto by no reason known to us beyond that of doing honour to a person whose name he bore."⁸⁹ There are, however, some grounds for considering it likely that even prior to 1717 the real owner of the bank was not the invalid veteran but rather our own Richard Cantillon. We have the latter's testimony of 1719 that he had been engaged in banking in Paris for quite a number of years, while another source states that he set up business as a banker there in 1716. Now it is improbable that two firms of the same name would exist without there being any distinction drawn between them in these sources. In addition, as we shall see, Cantillon later set up a relative of the same name as a straw man in a firm which belonged entirely to him. It is certain, at any rate, that the Cantillon banking company's contacts with its clientele were kept intact after the death of the elder Richard Cantillon.

As early as 1715 the banker Cantillon in Paris, without being more specifically identified, was said to be the banker with whom the English there had been dealing for years. The number of English people who resided in Paris at that time was exceptionally large. The majority of them were Catholic emigrants, many of them, like Cantillon, being Irish. Some had been driven out with the Stuarts, others had come to Paris on their own. With some of the most famous of them, such as the statesman and philosopher Henry St. John Bolingbroke (1678–1751), who had also joined the "Old Pretender," and James Fitzjames, natural son of James II, Duke of Berwick and Marshall of the French Army, Cantillon was intimately connected. In Bolingbroke's published correspondence we find confirmation of the contact already referred to in Fréron's account.⁹⁰ In the case of Marshall Berwick, Cantillon was distantly related to him by marriage. Cantillon married, apparently in London, in 1722 (the deeds of marriage there are dated February 16, 1722) Mary Anne Mahony, the daughter of Daniel Mahony (or O'Mahony, which led the French to write Ommani), a rich Irish merchant from Paris, from his marriage with the widowed Lady Clare, *née* Charlotte Bulkeley.⁹¹ Her sister, Anne Bulkeley, was the wife of Marshall Berwick, while her brother, Francois Bulkeley, in either 1736 or 1737, following Cantillon's death, married the latter's widow, who was his own niece.⁹²

These family relationships are of particular importance because both Berwick and Bulkeley had been close friends of Montesquieu since 1717 (or, in the latter case, at least since 1723) and accordingly it is at least very probable that Cantillon also knew Montesquieu. But even if Montesquieu did not know Cantillon personally, it can scarcely be doubted that he was aware of the manuscript left by the latter, since, as various letters show, he was on most friendly terms with Cantillon's widow between 1736 and the time of her death in 1749 or 1750, she then being the wife of Bulkeley.⁹³ At this juncture it may be said that it was quite likely Francois Bulkeley who published Cantillon's *Essai*. He would have waited until after the death of his wife because of the family consideration touched upon by Mirabeau, while his own death shortly afterwards (January 14, 1756) would explain why his contemporaries never found out who saw the work through the press.

It is only in respect of the post-1720 period that we know somewhat more about Cantillon, who spent these years partly in London, having withdrawn there from Paris, and partly in travel. This information is based on the court cases, to which Mirabeau alluded, and their files which were tracked down by Higgs, following a clue from Jevons.⁹⁴ It emerges that Cantillon, at the beginning of 1720, changed his Paris bank into a limited partnership under the name of "Cantillon and Hughes," the Cantillon in question being not our author but a four-year-old nephew, the other partner being a certain John Hughes. Cantillon himself was the partner of limited liability; he supplied the entire capital and was entitled to two-thirds of the profits, the other third going to Hughes, more or less in his capacity as manager. The nephew was not entitled to anything. Shortly afterwards—at the peak of the Mississippi speculation—the firm engaged in those transactions which ended in the court cases. It advanced about £40,000 to a series of people, mostly English nobility, to finance the purchase of Mississippi shares, the price of which these people expected to rise. Cantillon, who foresaw the imminent collapse of Law's system, directed Hughes to sell immediately the shares which had been pledged, invest the proceeds in sterling claims and hold only such quantity of shares as he could be called upon to hand over on demand. Cantillon adopted the standpoint, as he later explained, that the shares had not been lodged by serial number with him and were not a deposit in the strict sense but rather an undifferentiated lodgment and hence that no client had a claim to specific shares. This action yielded an extraordinary profit for the firm, as the shares which it disposed of at high prices could be replenished after the price collapse and the funds involved, instead of being tied up, could meanwhile attract substantial interest in perfectly safe sterling deposits.

Cantillon, who had made some of the advances personally, now pressed the speculators, who had suffered heavy losses, for repayment of the loans and he ultimately applied for a court order against them. The borrowers, in turn, insisted that the profits made by Cantillon and his firm be offset in their favor. They sued Cantillon for fraud and usury in the courts of Paris and London, holding Cantillon personally responsible for the conduct of the affair on the evidence of letters they produced between him and his firm. After Hughes had died in 1723 and Cantillon

liquidated the firm, Hughes's widow joined the opposition and backed her claims with the argument that Hughes had been not merely in name but also in fact a joint owner and as such was entitled to his share in the proceeds of the liquidation. It was some years before Cantillon could emerge victorious from the greater part of this litigation; one case indeed was still unresolved at the time of his death in 1734. Extensive documentation of these legal proceedings has been preserved, in particular letters from Cantillon to Hughes and to his attorney, which Higgs unearthed in the London Public Records Office and in the Bibliothèque Nationale in Paris. It is likely that even more have escaped detection through lack of adequate archival cataloging.⁹⁵ The available documents, in conjunction with many of the biographical sources already mentioned show that, having left Paris in 1720, not to return for almost six years, Cantillon lived first in Amsterdam, then for several years in his home in London, but that he nevertheless travelled frequently on the continent. Thus, he declared in court in the spring of 1724 that he proposed to make a business trip with his wife to Naples and other Italian cities, but that one way or another he would return to London "where he had his house and family and, in the vicinity, his son *who must have died young* being cared for by a nurse." In 1726 he did in fact set off on his travels with his wife; he wrote in April from Nampon near Abbeville, in May from Paris, in June from Rotterdam, and in December from Brussels and Cologne. It appears to have been similar in the following year; in April and May he wrote from Verona, apparently having visited Genoa in between, and then felt compelled by reports of the court case in Paris to return to that city. Between 1729 and 1733 he was frequently in Paris, in 1733 in Utrecht and Brussels, and in 1734 back in London, where he met his violent end, of which we already spoke. Higgs's account runs as follows:

On Monday, May 14, 1734, Richard Cantillon was driving about London to his friend Garvan in the Middle Temple, and to a house at Queen Square, Westminster, where he supped, and was set down at his door at ten at night. According to the evidence of a servant the next day, "for about three weeks last past his Master had taken the key of the Street-Door up into his Bed-Chamber; and (the Examinent) believes his reason for so doing was upon some Distaste he took to a servant discharg'd three weeks ago; but that last night he left the key, together with his Watch, below in the Parlour; and believes it was on account of this Examinant's being [ordered] to go early in the morning to take a Box for him in the Opera; because that he gave him Directions for that purpose . . . his Master last night . . . undrest himself in the Parlour as usual, took his Candle and Book, and went up to Bed soon after; and told this Examinant he would read. [This, it seems, was his usual practice.]

It was at first supposed that Cantillon fell asleep with his candle burning, and set fire to the house by accident. But facts soon transpired which left little doubt that the dismissed servant, Joseph Denier, *alias* Le Blanc, entered the house in the night with the complicity of the other servants (three men and two maids), and, having murdered and robbed his former master, set fire to the house.

To his wife and daughter, who were living in Paris, Cantillon bequeathed a considerable fortune, as one could hardly otherwise expect of a man who, according to his cashier, had within a short time drawn two and a half million (Livres Tour-

nois?) out of his business. A rough inventory, which he sketched out shortly before his death, shows cash in banks in London, Amsterdam, Vienna, Cadiz, and Brussels, land and houses in England, Paris, Asnières, and Louisiana, as well as various annuities and claims. While trade claimed some of his attention in earlier years, he seems to have devoted himself predominantly to it in the latter years; we find him described occasionally as a silk or wine merchant and know that he took an interest in copper also. It is true that a servant once described him as a tyrant but, generally speaking, he was greatly trusted and was well liked by his friends. He was noted for his great candor and this brought him into conflict with Law, who took offence at his spontaneous criticism. His letters, in Higgs's opinion, show "Cantillon to have been a person of extreme ability and very great energy"; their "writer was possessed of great clearness and grasp, quick to penetrate ambiguity or weakness of argument, able at combination and calculation, and so thorough a master of the foreign exchanges that his speculations exhibit a scientific prevision amounting almost to certainty." Apart from the letters there exists a memorandum (which we can at least with considerable certainty ascribe to Cantillon) printed with the file of the Paris law suit, in which he elucidates for the benefit of his attorney the distinction between usury and a profit made by foreign exchanges at current market rates; this resembles the corresponding passage in the *Essai* and apart from the other authors he mentions Dupuy and Savary in it.⁹⁶

V

While the magnitude of his scientific accomplishment can scarcely be disputed, it is extraordinarily difficult to assess his actual influence on the development of economic thought. One may deduce from the various instances of either pre-publication or post-publication though unacknowledged utilization of the *Essai* that many other writers knew him and drew upon his work. The exceedingly rich literature from the mid-eighteenth century has scarcely been investigated with this in mind. The time and milieu in which Cantillon wrote favored to an exceptional degree a reverberating impact even where personal communication was involved, for it was this same Anglo-French society of the second quarter of the century which, starting out from an intellectual revolution, paved the way for the political revolution and the upswing of the political sciences. Not only Montesquieu but also Voltaire and Rousseau were in England at this time, in close contact with those circles in which Cantillon moved. In the same way David Hume and Adam Smith found decisive stimulation in France. As we said, Smith was acquainted with Cantillon. Whether the same can be said of Hume is a more difficult and no less tantalizing question, for his *Political Discourses*, which embody his economic treatises, appeared three years before Cantillon's *Essai*. From a comparison of Hume's monetary theory with that of Cantillon one gets the inescapable impression that Hume must in fact have known Cantillon.⁹⁷

It may be recalled that part of the relevant passages from Cantillon appeared in Postlethwayt's Dictionary in 1751, that is a year before the publication of Hume's work, and the acquaintance may have originated there. However, the similarities are by no means confined to the passages reproduced by Postlethwayt. There are several instances such as Hume's treatment of the effects of an increase in the money supply or his refutation of the notion that such an increase could induce a fall in the interest rate: these amount to a superficial resemblance which, however, loses force once it is realized that Hume is no match for Cantillon in profundity of insight.⁹⁸ Hume would have had adequate opportunity to become acquainted with the *Essai* manuscript, for he spent the greater part of three years in France after 1734 and in later years—beginning especially with Montesquieu in 1749—he corresponded regularly with French scholars. This surmise is strengthened considerably when one encounters in Hume's economics notes, which date predominantly from 1740/41, the observation that a pound of steel, when processed, can have a value of £10,000, which clearly reminds one of Cantillon's example of the watch spring.⁹⁹ If, in addition to Smith and Hume, perhaps even Malthus had known and borrowed from Cantillon—for there are several instances in his essay on the principles of population where this seems likely—this would suffice to establish a persistent influence on all subsequent economists¹⁰⁰.

In addition to our earlier evidence of the efficacy of Cantillon's treatise in France, it is perhaps worth noting that the year of its publication, 1755, was consistently identified by contemporary writers as the year in which the new school of economics emerged. Germain Garnier, the first proponent of the abstinence theory, drew extensively but without acknowledgment on Cantillon's ideas in writing his 'Abrégé élémentaire des principes de l'économie politique' (Paris 1796) and sought to reconcile them with the views of Smith, whom he had translated into French, and of the Physiocrats.^{101 102} At times Garnier borrowed not only Cantillon's examples but even reproduced his argument verbatim.¹⁰³

Cantillon tended to be forgotten in France once J. B. Say led the way in ignoring all writers before Adam Smith. The *Essai* seems, however, to have been read to some extent in Germany and Italy also. The influence of the Italian translation of the *Essai* shows up at least in G. Filangieri, while in Germany not only Graumann, to whom we already referred, but also the "German Physiocrat" Jakob Mauvillon, whose father brought out an edition of the *Essai*, must have known Cantillon.¹⁰⁴ Firm evidence exists in the case of von Pfeifer, who, without naming Cantillon but clearly referring to him, said that "the Physiocratic system had been produced in England, propagated in France and finally transmitted to Germany".¹⁰⁵ G. A. Will, having quoted this remark of von Pfeifer's in his "Versuch über die Physiokratie" (1782), added in turn that "it is indeed correct that, among others, the English writer Cantillon, in his delightful study on commerce, delineated many years ago the theory of the Physiocrats concerning the nature of the state in terms of the underlying principles and main conclusions."¹⁰⁶

NOTES

1. The author is greatly indebted to Professor Henry Higgs, London, Professor Dr. Fritz Karl Mann, Cologne, and Sektionsrat Dr. Ewald Schams, Vienna, who read the manuscript of this Introduction and by their generous comments helped to eliminate some faults and fill numerous gaps.
2. Adam Smith, *The Wealth of Nations* (London: Cannan, 1904 and later), vol. I, p. 70.
3. The French translation of Tucker's "Reflections on the Expediency of a Law for the Naturalisation of Foreign Protestants" which Turgot, probably on the suggestion of Gournay, undertook, bears the same fictitious designation of place of printing. The translation, entitled "Questions importantes sur le Commerce," and the original text were presumably printed in Paris. A London bookseller named Fletcher Gyles had, by 1755, long since ceased to exist.
4. The fact that this edition appeared in various guises is presumably attributable to the enterprise of a bookseller, who was anxious to promote sales by altering the title page; it would appear to be dated variously 1755 and 1761.
5. *Saggio Sulla Natura de Commercio*, Autore Inglese, with a Preface by F. Scottoni (Venice, 1767).
6. The first edition of this work, although dated 1756 on the title page, did not actually appear until 1757. See G. Weulersse, *Les Manuscrits Économiques de Francois Quesnay et du Marquis de Mirabeau aux Archives Nationales* (Paris, 1910), p. 19 ff.
7. See "J. J. Rousseau, ses Amis et ses Enemis. Correspondence publiée par M. G. Streckeisen-Moulou", with an Introduction by J. Levallois (Paris, 1865), vol. II, p. 265 ff. A more extensive passage is to be found in *Oeuvres économiques et philosophiques de F. Quesnay*, ed. A. Oncken, (Frankfurt and Paris, 1888), p. 4 ff and a German version in A. Oncken, "Entstehung und Werden der physiokratischen Theorie," in *Vierteljahrsschrift für Staats- und Volkswirtschaft*, ed. K. Frankenstein, vol. 5 (Leipzig, 1895), pp. 275 ff., as well as in the same author's "Geschichte der Nationalökonomie." Erstel Teil (Leipzig, 1902 and later), pp. 318 ff. A practically identical account of the conversation taken, however, from a different letter which Mirabeau wrote towards the end of the 1770s, is contained in the first-mentioned article by Oncken; it was taken from the well-known work of L. de Lomiere, *Les Mirabeau, nouvelles études sur la société française au XVIIIe Siècle* (Paris, 1879), 2:170 ff.
8. See Oncken, "Entstehung und Werden," p. 279. How little authentic Mirabeau's account of the course of this conversation is, can be deduced from the fact that, in a letter written to his brother immediately after the conversation, he describes himself as the victor. See *ibid.*, p. 275, and Lomenie, *Les Mirabeau*, 2:196.
9. See the 1757 edition, vol. 7, p. 821, reprinted in Quesney, *Oeuvres Economiques et Philosophiques*, p. 218.
10. See *Mémoires inédits de l'Abbé Morellet* (1823), 1:37 ff.
11. See Eugene B. Daire's edition of Turgot's work (Paris, 1848), 2:819.
12. J. F. Melon, *Essai politique sur le Commerce* (Rouen and Bordeaux, 1734). For that reason Melon cannot be described as preceding Cantillon, for the latter died in the year in which Melon's work appeared.
13. See "Notice abrégée des différents écrits modernes qui ont concouru en France à former la science de l'Economie politique," in Quesnay, *Oeuvres Economiques et Philosophiques*, under "The Years 1754 and 1755", p. 148.
14. For a more detailed account see Henry Higgs, *Economic Journal* (1891) 1:262 ff.
15. J. Ph. Graumanns, *Gesammelte Briefe von dem Gelde* (Berlin, 1762) p. 114 ff.
16. Sir James Steuart, *An Inquiry into the Principles of Political Economy*, Book III, II/3 or vol. XV, p. 284.
17. See E. B. de Condillac, "Du Commerce et du Gouvernement, considère relativement l'un à l'autre," (Amsterdam and Paris, 1776), chap. 16, p. 143, *Oeuvres Complètes* (Paris: 1803), vol. 6, p. 141. See also A. Lebeau, *Condillac économiste* (Paris, 1903), pp. 11, 350, 412.

18. Some further references to Cantillon's influence on economists of this period will be found towards the end of this Introduction.
19. Charles Ganilh, *Des systèmes d'économie Politique*, 2nd ed. (1821), vol. 1, pp. XV, 134; vol. 2, p. 107.
20. Physiocrats. Quesnay, Dupont de Nemours, Mercier de la Rivière, L'Abbé Baudeau, Le Trosne, Avec une Introduction sur la Doctrine des Physiocrates, des Commentaires et des Notices Historiques par Eugène Daire (Paris, 1846), Part 1, p. 74, 82, 274. It is not easy to understand why Daire did not deal systematically with the *Essai*, which he thought highly of, in editing the 15-volume Collection des principaux économistes (1843–1848), the second volume of which contains the above-mentioned "Physiocrats"; this fact certainly contributed to the neglect of Cantillon.

Julius Kautz, *Theorie und Geschichte der Nationalökonomik*, Propyläen zum volks- und staatswirtschaftlichen Studium. Zweiter Teil. Literatur-Geschichte der National-Ökonomik (Vienna, 1860), p. 320ff.

21. W. Roscher, *Geschichte der Nationalökonomik in Deutschland* (Munich, 1874), p. 481.
22. Fr. von Sivers, *Jahrbücher für Nationalökonomie und Statistik*, vol. 23 (Jena, 1874). On pages 158–62, which are devoted entirely to Cantillon, he writes: "Eschewing superficial opinion, Cantillon, in his 'Essai sur la nature du commerce en général,' subjects the idea that the entire population is dependent upon the landlords to a process of profound reasoning. More incisive observation and keener powers of discernment lead him to see that value cannot be explained in terms of supply and demand only and that the market price formed by supply and demand gravitates around a mean, which is itself determined by other causes It suffices to record, that we find here the three-fold division of society, which was later considered a discovery of Quesnay. The agricultural labourers produce the wealth, only the landlords are truly independent, the artists and merchants are supported by the net income of the landlords. The division of rent is the same as in the 'Analyse du tableau économique'; the only difference is that there the proportions are 2.1.3.5, while here we have a division into sixths."
23. Léonce de Lavergne, *Les économistes français du dix-huitième siècle* (Paris, 1870), p. 167. The passage from which the cited quotation is taken continues: "Property in general and specifically landed property is presented as the basis of society. From this principle Cantillon derives all the inferences which follow, especially in relation to freedom of commerce in all its forms. If he had lived longer, he would have become one of the leading figures of the school of the Economistes."
24. W. Stanley Jevons, "Richard Cantillon and the Nationality of Political Economy," *Contemporary Review* 39, January 1881, reprinted in *The Principles of Economics. A Fragment of a Treatise on the Industrial Mechanism of Society and other Papers* with a Preface by Henry Higgs (London, 1905), pp. 155–83.
25. Jevons, *Principles of Economics*, p. 164.
26. Article on "Cantillon," by H. R. Tedder, *Dictionary of National Biography*, ed. L. Stephen, Sidney Lee (London, 1886), 8:455.
27. Article on "Cantillon," by Henry Higgs, F. Y. Edgeworth, and Stephan Bauer, *Dictionary of Political Economy*, ed. R. H. Palgrave (London, 1894).
28. Article on "Cantillon," by Castelot, *Nouveau Dictionnaire d'Economie Politique*, ed. Leon Say, Supplement (Paris, 1897).
29. J. K. Ingram, *A History of Political Economy* (Edinburgh, 1888), p. 60 ff.
30. R. Zuckerkandl, *Zur Theorie des Preises mit besonderer Berücksichtigung der geschichtlichen Entwicklung der Lehre* (Leipzig, 1889).
31. A. Espinas, *Histoire des Doctrines Economiques* (Paris, 1891), p. 179–97.
32. Alfred Marshall, *Principles of Economics* (London, 1891), p. 53. In subsequent editions Marshall altered his verdict and he remarks (in a footnote to the passage, in which he describes the

- Physiocrats' achievement as the first attempt at a London 1916, Appendix B 2, p. 756), that Cantillon has some claim to being considered systematic.
33. See the Letters and Journal of William Stanley Jevons, edited by his wife (London, 1886), p. 425.
 34. Henry Higgs, "Richard Cantillon," *Economic Journal* (1891) 1:262-91.
 35. Cantillon, *Essai sur Le Commerce*, Reprinted for Harvard University (Boston: Geo. H. Ellis; London; Macmillan, 1892), with a Preface by Henry Higgs.
 36. See H. S. Foxwell, Introduction to W. St. Jevons, *Investigations in Currency and Finance* (London, 1884), p. XLII.
 37. See E. Cannan, *A Review of Economic Theory* (London, 1929), p. 20n. This fascinating book, which finally prompted me to devote myself earnestly to a study of Cantillon, gives the best synoptic view of Cantillon's importance for the entire development of economics.
 38. See the excellent appreciation in A. Espinas, *Historie des Doctrines Economiques*, pp. 179-97, which appeared as early as 1891.
 39. See the German edition, Charles Gide and Charles Rist, *Geschichte der volkswirtschaftlichen Lehrmeinungen*, 2nd ed. (Jena, 1921), p. 52.
 40. See A. Oncken, *Entstehung und Werden der Physiokratischen Theorie*, p. 280ff.n.
 41. A. Oncken, *Geschichte der Nationalökonomie. Part One* (only part), *Die Zeit vor Adam Smith* (Leipzig, 1902), particularly p. 279.
 42. Ernst Oberföhrer, *Die Idee der Universalökonomie in der Französischen Wirtschaftswissenschaftlichen Literatur bis auf Turgot* (Probleme der Weltwirtschaft. Schriften des kgl. Instituts für Seeverkehr und Weltwirtschaften der Universität Kiel, Nr. 23), (Jena, 1915), p. 124.
 43. See W. Lexis, article on "Physiokratisches System" in *Handwörterbuch der Staatswissenschaften*, 3rd ed. (Jena, 1913) 6:1039: "In particular we find . . . what are undoubtedly essential elements of Physiocratic theory anticipated . . . in Cantillon's *Essai*, even though Quesnay refused to recognize this and in fact spoke disparagingly of Cantillon in a letter (?) to Mirabeau." Cantillon is certainly less one-sided than the Physiocrats. See also his *Allgemeine Volkswirtschaftslehre* (Leipzig, 1913), in which Cantillon's *Essai* is similarly described as "the first attempt at a comprehensive theory of the economy" (p. 239).
 44. Fr. J. Neumann, "Zur Geschichte der Lehre von der Gravitation der Löhne nach gewissen Kostenbeträgen," *Jahrbücher für Nationalökonomie und Statistik*, 3rd ser., vol. 17 (Jena, 1899), p. 147ff.
 45. O. von Zwiedineck-Sudenhorst, *Die Lohnpreisbildung, Grundriss der Sozialökonomik*, Vol. IV/I, p. 320. There the following opinion of Cantillon is expressed: "This Irish pioneer of Physiocratic ideas spells out all the essential arguments which are to be found in what is commonly considered to be the edifice of classical theory."
 46. See J. Schumpeter, *Epochen der Dogmen- und Methodengeschichte, Grundriss der Sozialökonomik*, 1st. ed (Tubingen 1914), vol. I, p. 1, p. 143.
 47. The most detailed monograph concerning the subject matter of the *Essai* and its relationship to both earlier and later works is that of R. Legrand, *Richard Cantillon, Un Mercantiliste Precurseur des Physiocrates* (Paris, 1900). Like most other studies of Cantillon, it suffers from the shortcoming that it focusses not so much on Cantillon's originality as on the question whether one should consider him as being still part of the Mercantilists or already part of the Physiocrats. Detailed discussion of the contents of the *Essai* are also contained in the already mentioned studies of Jevons, Espinas, Higgs (*Quarterly Journal of Economics* 6 (1892), as well as in W. Rouxel, "Un Precurseur des physiocrates: Cantillon," *Journal des Economistes* (1892); W. Kretschmer, "Über den Richard Cantillon zugeschriebenen *Essai sur la nature du commerce en général* mit besonderer Berücksichtigung der Lehren von Otto Effertz" (diss., Liestal, 1899). Analytical studies of specific theories of Cantillon will be referred to as the occasion requires.
 48. J. F. Melon, *Essai politique sur le commerce* (Rouen and Bordeaux, 1734).
 49. Dutot, *Reflexions politiques sur les finances et le commerce*, 1735.

50. A. Huart, "Cantillon, Precurseur des Hedonistes," *Monde économique*, May 17 and 31; June 7, 21 and 28; July 29, 1913. For information concerning this article, which was not available in either the Vienna or the Berlin libraries, I am indebted to Sektionsrat Dr. Ewald Schams, Vienna.
51. With reference to Chapters IV and V on the formation of the towns and cities, see R. Meunier, "Théories de la formations des villes," *Revue d'Economie politique* (Paris, 1910).
52. Apart from the aforementioned studies of Jevons, Higgs, and Neumann, see especially A. Landry, "Une théorie négligée. De l'influence de la direction de la demande sur la productivité du travail, les salaires et la population," *Revue d'Economie politique*, 24 (Paris, 1910), and "Les idées de Quesnay sur la population," *Revue d'histoire des doctrines économiques et sociales*, 2 (1909): esp. 83 ff. In addition see R. Picard, "Etude sur quelques théories du salaire au XVIIIe siècle," 3 (1910): 153 ff; and R. Gonnard, *Histoire des Doctrines de La Population* (Paris, 1923), pp. 142, 173 ff., as well as the *idem*, "Les doctrines de la population avant Malthus," *Revue d'histoire économique et sociale* 17 (Paris, 1929): esp. 223.
53. Compare the well-known sentence with which Part I of Chapter XI, Book I of *The Wealth of Nations* commences—"As men, like all other animals, naturally multiply in proportion to the means of their subsistence, food is always, more or less, in demand"—with the exposition in Chapter XV of Part One of Cantillon's *Essai*, but especially with the sentence—"Men multiply like Mice in a barn if they have unlimited Means of Subsistence" (p. 110). Huart ("Cantillon precurseur des Hedonistes") thinks one is justified in assuming that Malthus was directly influenced by Cantillon.
54. *Quarterly Journal of Economics* 6:455.
55. Gaetan Pirou, "La théorie de la valeur et des prix chez W. Petty et chez R. Cantillon," *Revue d'Histoire des Doctrines Economiques et Sociales*, 4th year (Paris, 1911), p. 271. Apart from the previously mentioned studies by R. Zuckerkandl and R. Legrand, the place of Cantillon's value and price theory in the history of economic thought is also dealt with in R. Kaulla, *Die Geschichtliche Entwicklung der Modernen Werttheorien* (Tübingen, 1906), pp. 92ff.; and H. R. Sewall, "The Theory of Value before Adam Smith, Third Series, American Economic Association, vol. II, no. 3 (New York, 1981). See also A. Dubois, *Revue d'economie politique* (Paris, 1897), pp. 849 ff. "Les theories psychologiques de la valeur au XVIIIe siecle."
56. On Cantillon's theory of entrepreneur see especially E. Cannan, *A Review of Economic Theory*, pp. 285 ff, 303 ff.
57. See passage quoted from *Silvers* and referred to in n.22.
58. P. Harsin, *Les doctrines monetaires et financières en France du XVIe au XVIIIe Siecle* (Paris, 1928), pp. 227-236. In addition to the studies of Jevons and Legrand, see A. E. Monroe, *Monetary Theory before Adam Smith* (Cambridge, 1923); J. W. Angell, *The theory of international prices* (Cambridge, 1923); J. W. Angell, *The theory of international prices* (Cambridge, 1926) especially p. 207 ff., and F. Hoffman, *Kritische Degmengeschichte der Geldwerttheorien* (Leipzig, 1907), especially pp. 56-64.
59. M. W. Holtrop, *De Omloopsnelheid van het Geld* (Amsterdam, 1928), p. 9.
60. In addition to Jevons see S. D. Horton, *Sir Isaac Newton and Englands Prohibitive Tariff upon Silver Money* (Cincinatti, 1895), reprinted in the same author's *Silver and Gold and Their Relations to the Problem of Resumption* (Cincinatti, 1895), as well as W. St. Jevons' unfinished reply, "Sir Isaac Newton and Bimetallism" reprinted in his *Investigations in Currency and Finance*, ed. by H. S. Foxwell (London, 1884), p. 330ff.
61. In place of 1717, Cantillon himself wrote erroneously 1728 (p. 373) and the fact that he used words rather than numbers means that a writing or printing error can practically be ruled out. It is very difficult to understand such an error, since Cantillon not only experienced the event in question but even appears to have been in direct contact with Newton. The error persisted thereafter in the literature and is repeated in Steuart. *Inquiry into the Principles of Political*

Economy, Book III, chap. 7, 3, p. 47 of the 1796 Basle edition or vol. 2, p. 135 of the collected works (London, 1805), as well as in J. G. Hoffmann, *Die Lehre vom Gelde* (Berlin, 1838), p. 104. On the other hand, in reproducing the relevant passage J. H. Graumann (*Gesammlete Briefe vom Gelde etc.*, Berlin, 1762) corrected the error. See also Ph. Kalkmann, *Englands Übergang zur Goldwährung im Achtzehnten Jahrhundert* (Strabburg, 1895), p. 127.

On Cantillon's exchange rate theory see A. M. de Jong, *Bijdrage tot de Geschiedenis van de Theorie der Wisselkoersen voor Adam Smith*, *De Economist*, 74th year, Nos. 5–8, s'Gravenhage (May–August 1925).

62. See also S. Weulersse, *Le Mouvement Physiocratique en France* (Paris, 1910), (2 volumes) and the same author's recent work *Les Physiocrates* (*Encyclopédie Scientifique* (Paris, 1931) and G. Schelle, *Le Docteur Quesnay* (Paris 1907), pp. 131–184.
63. In support of what has been said, reference shall be made here to a number of these unfounded statements in the later literature; the earlier sources will be dealt with in due course. The list commences with G. Kellner, who claims *Zur Geschichte des Physiokratismus: Quesnay-Gournay-Turgot* (Göttingen, 1847), p. 93, that it was Gournay who prompted Cantillon (died 1734!) to translate his *Essai*. Similarly, a recent author, J. W. Angell *The Theory of International Prices* (Cambridge, 1926), p. 213n. remarks rather patronizingly that it is improbable that Cantillon got his ideas from Hume's *Essays*, the date of whose publication he pushes back to 1741 in place of 1752. It was Grimm's account, which we shall come to, that prompted many French writers to give 1733 as the date of Cantillon's death, though this does not explain how R. Gonnard *Histoire des doctrines de La Population*, (Paris, 1923), p. 142 makes 1735 out of it. Other authors have taken upon themselves to alter the date of publication of the *Essai*, thus J. Bonar *Philosophy and Political Economy* (London, 1893), p. 106 writes 1752, while E. S. Furniss *The Position of the labourer in a system of nationalism* (New York, 1920), p. 162ff writes 1736. P. Harsin *Les doctrines monétaires et financières en France du XVIe au XVIIIe Siecle* (Paris 1928), finds a simple solution to the problem as to who finally published the *Essai* by attributing the deed to Eleazar Mauvillon, of whom we know only that he took the *Essai*, which was published in 1755, and reprinted it a year later together with his translation of Hume's *Political Discourses*; this action itself contradicts the assumption that he had brought out the first edition of the *Essai* a year earlier. No less unfounded is the statement of H. R. Sewall *The Theory of Value Before Adam Smith* (New York, 1901), p. 80 that Cantillon was of French origin or that of R. Legrand, in his frequently cited work, that Cantillon had personally visited all the countries which he mentions in his *Essai*.
64. See Higgs' *Preface to W. St. Javons' Posthumous Principles of Economics* (London, 1905), pp. 10 and 13.
65. *Les doctrines monétaires etc.*, p. 228n. Huart (op.cit., May 17, p.5) comments that it is quite remarkable that the "Procès-Verbaux du Conseil du Commerce et du bureau du Commerce 1700–1791," published by Bonnjustieux and Lelong, contains nothing about Cantillon.
66. For the convenience of those who are familiar with the Cantillon literature, it may be pointed out that in what follows the available data concerning both the author and *Essai* are plagiarism by Postlethwayt, the plagiarism of Serionne (see footnotes 83 and 86) and the connection with Montesquieu (see footnote 93).
67. H. Thirrior, *La vie privée des financiers au XVIIIe siècle* (Paris, 1895); Cornelis de Will, *La Société française et la Société anglaise au XVIIIe siècle* (Paris, 1864); J. H. Hesse, *Memories of the Pretenders and Their Adherents* (London, 1845).
68. See p. 43 ff. 52 and 71 of the third volume of the complete edition, undertaken by Maurice Tourmeaux, of *Correspondence littéraire, philosophique et critique par Grimm, Diderot, Raynal, Meister etc.* (Paris, 1878).
69. *L'annee Littéraire, Année MDCCLV*, by M. Freron (Amsterdam), vol. 5, p. 67.

70. *Biographie Universelle Ancienne et Moderne* . . . Nouvelle edition, publiée sous la direction de M. Michaud, vol. 6 (Paris, 1843), under the false name Philippe de Cantillon. The author of the article is said to be Weiss.

Nouvelle Biographie Générale depuis les temps les plus reculés jusqu'à nos jours, publiée par MM. Firmin Didot Frères sous la direction de Mr. le Dr. Hoefer, vol. 8 (Paris, 1855), similarly under the name Philippe Cantillon.

71. *The Letters of Horace Walpole, Earl of Oxford*, (London, 1840), vol. 1, pp. 274 and 295. See also *The Works of Jonathon Swift*, ed. Walter Scott (London, 1824), vol. 16, p. 262ff.
72. *The Country Journal or The Craftsmen* (18 May and 15 June 1734); *Reads Weekly Journal or British Gazetteer*, (1 June 1734); and *Gentleman's Magazine* (May and 7 December 1734)
73. See *Complete Peerage of England, Scotland, Ireland, Great Britain and the United Kingdom, extant, extinct or dormant*, alphabetically arranged and edited by G.E.C., vol. 7 (London, 1896) p. 217 (Stafford), and vol. 3 (London, 1890), p. 319 (Farnham) as well as Higgs, *Economic Journal*, vol. 1, p. 288, who points out that the sole surviving child out of the second marriage of Cantillon's daughter, Lady Henrietta Farnham, did not die until 1852. She married the Right Hon. Dennis Daly and was mother of the first Lord Dunsandle, whose descendants are the direct representatives of Cantillon. I mention this here, because this clue could perhaps one day help to add to the little that we now know about Cantillon.
74. Mirabeau, *L'Ami des Hommes, ou Traite de la Population*, Première Partie (Avignon, 1756) recte 1757), p.6. See also the footnote in chap.2, p. 18.
75. *Ibid.* p. 85 ff. (beginning of chapter 7).

The quotation from Cantillon, which precedes this comment, is from p. 107 of the *Essai*, beginning with "le nombre des habitants" and continuing to the end of the paragraph on the following page.

76. Alfred Stern, *Das Leben Mirabeaus* (Berlin, 1889), vol. 1, p. 26, who says that "a very considerable influence on the development of his ideas was exercised by Cantillon's "Essai sur la nature du commerce en général," with which he was familiar in manuscript form for a long time before its publication."
77. See Stefan Bauer, "Studies on the Origin of the French Economists," *Quarterly Journal of Economics*, vol. 5:101 (1891)
78. See the frequently cited article in the *Economic Journal*, vol. 1, (1891), as well as the description of the manuscripts in G. Weulersse, *Les Manuscrits Economiques de Francois Quesnay et du Marquis de Mirabeau aux Archives Nationales* (Paris, 1910), p. 2 ff.
79. *Economic Journal*, vol. 1:267 ff.
80. In the light of these documents we can only be amused when L. Brocard in his book about Mirabeau's *Ami des Hommes* (*Les doctrines économiques et sociales du Marquis de Mirabeau dans l'Ami des Hommes* [Paris, 1902], p. 48), without knowing Higgs's study itself, turns indignantly on R. Legrand because the latter, claiming support from Higgs for what was an extremely cautious comment, had dared to say in his Richard Cantillon, *Un mercantilliste précurseur des physiocrates* (Paris, 1900), p. 8 that: "one may suspect that the Marquis Mirabeau had the intention of utilizing Cantillon's manuscript and, after touching it up, publishing it under his own name."
81. "Great Britain's True System" (London, 1757).
82. *An Essay upon Money and Coins* (anonymous), in two parts, (London, 1785/58).
83. In France also there was at least one plagiariser at work quite soon after the appearance of the *Essai*. Accarias de Serionne in his *Les Intérêts des Nations de l'Europe développés relativement au Commerce* (Leyden, 1766), 2nd. ed. (Paris, 1767) transcribed several passages from the *Essai* in his second volume (second edition) as follows: In a footnote on p. 127 a verbatim

account of living conditions in China, p. 50 ff of the *Essai*; on p. 135 ff, the exposition on the different value relationships between gold and silver in various countries (p. 364–366 of the *Essai*); and on p. 148 the account of Newton's point of view at the time of the English coinage reform, not forgetting the erroneous date of 1728, p. 377 of the *Essai*.

84. See the editorial note in *Economic Journal* (1896), vol. 6:165.
85. *The Universal Dictionary of Trade and Commerce*, translated from the French of the Celebrated Monsieur Savary . . . with large additions and Improvements incorporated throughout the whole work which more particularly accommodate the same to the *Trade and Navigations of the Kingdoms* . . . by Malachy Postlethwayt (London, 1755), vol. 1, 1751, vol. 2, 1755. See especially the article on "Balance of Trade, Banks, Barter, Cash, Circulation, Coin, Exchange and Interest" in vol. 1 and the articles on "Labour and Money" in vol. 2. The article on "Labour" reproduces verbatim almost the entire contents of chapter 2 and chapters 7–11 of the first part of the *Essai*.
86. A dissertation on the "Plan, Use and Importance" of the *Universal Dictionary of Trade and Commerce*, translated from the French . . . *Addressed to the Nobility, Gentry, Merchants and of Great Britain* (London, 1749).
87. In the example in which the relative shares of labour and material in the value of a watch spring, which in the French text are obviously incorrectly given as "un a un" (p. 35) are correctly given in the above source as "one to a million." The fact that Postlethwayt in his earlier mentioned work, "Great Britain's True Systems" (London, 1757), p. 154 gives the exact proportion of 1:1,538,460 prompted Cannan (84) to ask if Postlethwayt didn't in fact possess the lost appendix, a question that cannot be answered.
88. *Economic Journal* vol. 1, pp. 270–275.
89. H. Higgs *Economic Journal*, vol. 1:284 bases this account on a character reference found together with the records of the law suit Carol against Cantillon (Bibliothèque Nationale, Fm. 2740, 2838), to which we shall shortly refer. The details which follow are derived from Higgs.
90. *Letters Historiques, Politiques, Philosophiques et Particulières de Henri Saint John Bolingbroke depuis 1710 jusqu'à 1736*, edited by Grimoard, (Paris, 1808), vol. 2m:452 and 455, *Letters to Abbe Alari* (2 and 3 February 17–18).
91. This account is based partly on Higgs and partly on the articles on Bulkeley and Clare in the "Dictionnaire généalogique, chronologique et historique . . . par M.D.L.C.D.B". (François Alexandre Aubert de la Chesnay-Des-Bois) (Paris, 1757), vol. 1. According to the latter source Daniel Mahoni was "comte titulaire de Castille, par dou du feu roi Philippe V. lieutenant-general des ses armées."
92. If the account of the said "Dictionnaire généalogique" is correct, Higgs assumes that the François Bulkeley, whom Cantillon's widow married, was her maternal cousin. Bearing in mind what shall be said in the text concerning Bulkeley, it is worth setting out what data I could collect about his life:

Born in London on September 11, 1686, son of Henry Bulkeley, who was land steward (Haushofmeister) to Charles II and James II, brother of the second Viscount Bulkeley. He came to France in 1700, advanced in service under Marshall Berwick to the rank of lieutenant-general, took part in the unsuccessful expedition of the "Old Pretender" to Scotland in 1715/16, on which occasion he and the son of Berwick were to convey a large sum of money to the "Old Pretender." He died on January 14, 1756, having been permitted to hand over his Irish infantry regiment to his son. Based on *Memoirs du Maréchal de Berwick*,—écrits par lui même—vol. 2 (en Suisse, 1778), pp. 169, 172 and *Lettres historiques, politiques, philosophiques et particulieres du Henri Saint-John, Lord Viscomte Bolingbroke, depuis 1710 jusqu'en 1736*, edited by Grimoard, vol. 3 (Paris, 1808), p. 132n.

93. See *Correspondance de Montesquier*, publiée par François Gebalin et André Morize (Paris, 1914), two volumes. The first letter from Bulkeley to Montesquieu is dated September 10, 1723,

- the last September 20, 1751. Madame Bulkeley is mentioned for the first time by Montesquieu in a letter written in May or June 1740 and for the last time on July 22, 1749, when, in a letter to Bulkeley, he wrote that he had just spoken with Mme. Bulkeley. As early as July 18, 1736, however, Montesquieu wrote to Bulkeley: "Faites ma cour a Mme. de Cantillon."
94. See the article in *Economic Journal* (1891), p. 277 ff.
 95. See Higgs, *Economic Journal* (1891), pp. 276, 284.
 96. See the two folio volumes in the *bibliothèque nationale, Paris, fm 2740 and 2838*, printed chez Andre Knapen (Paris, 1730). See Higgs, *Economic Journal* (1891), p. 284, and *Quarterly Journal of Economics*, vol. 6:438 (1892), p. 438.
 97. Huart (loc. cit. article of July 26) also considered or considers that the influence of Cantillon on Hume was very great. A.E. Monroe, on the other hand (loc. cit., p. 228) is of the opinion that there are no grounds for assuming that Hume was familiar with Cantillon's manuscript, even though it is known that it passed through many hands.
 98. See also L. Cossa, *An Introduction to the Study of Political Economy* (London, 1893), p. 255, who says that "Hume's Political Discourses . . . don't stand comparison in terms of coherency or unity with Cantillon's more concise, systematic and thorough exposition."
 99. J. Hill Burton, *Life and Correspondence of David Hume* (Edinburgh 1846), p. 367. This contains only excerpts from Hume's economic writings. Mr. J.Y.T. Greig, who, as literary executor, is preparing a complete edition for the press, had the extraordinary kindness to send me the full text by Hume, and I find that it contains no further indications of a direct influence of Cantillon on Hume.
 100. As another example of Cantillon's influence on English writers Huart mentions W. Paley, *Principles of Moral and Political Philosophy* (1785), VI/II.
 101. See W. Hasbach, *German Garnier als erster Aufsteller der Abstinenztheorie, Jahrbuch für Gesetzgebung usw* (1905).
 102. See E. Allix, "L'oeuvre économique de Germain Garnier traducteur d' Adam Smith et Disciple de Cantillon." *Revue d'histoire des doctrines économiques et sociales*, V (Paris, 1912).
 103. As in preceding reference, p. 333.
 104. Delle leggi politiche e economiche "Scienza della legislazione II," (1780), reprinted in *Scrittori Classici Italiani, di Economia Politica*, edited by Custodi, *Parte Moderna*, vol. 32. See chap. 4.
 105. J. F. v. Pfeifer, *Natürliche, aus dem Endzweck der Gesellschaft entstehende allgemeine Polizeiwissenschaft, Part II* (Frankfurt, 1779), p. 62.
 106. G. A. Will, *Versuch über die Physiokratie, deren Geschichte, Literatur, Inhalt und Werth* (Nürnberg, 1782), p. 4.

Cantillon's *Essai*: A Current Perspective*

by Vincent J. Tarascio

*University of North Carolina
Chapel Hill*

Professor Spengler's, "Richard Cantillon: First of the Moderns," published in 1954, remains the classic survey article of Cantillon's contributions to economic thought.¹ These contributions consist of views on population and related matters, theory of value, monetary theory, and international trade and finance. Many of his ideas became a part of the economic thought of the closing years of the eighteenth century, and, as Professor Spengler points out, unfortunately, Cantillon's name had been stripped from most if not all of his ideas. Professor Spengler, then, has done both Cantillon and the economics profession a service by restoring to Cantillon his rightful place in the history of economic thought.

My purpose is to reexamine certain aspects of Cantillon's ideas from a current perspective, both from the point of view of theory as well as current economic problems. Hence my approach will be selective rather than exhaustive. I hope to demonstrate the lasting qualities of Cantillon's contributions contained in the *Essai*.^{2*}

Cantillon on Population

Professor Spengler has provided a comprehensive discussion of Cantillon's views of population, which he groups under five headings: "(1) the mechanism by which numbers are adjusted in time and space (2) the demand for labor and population (3) foreign trade, population capacity, and population growth (4) the genesis of living standards and (5) the distribution of population in space." (110) In the case of population, I shall make explicit what is implicit both in Cantillon and Spengler's excellent discussion.

To begin, what Cantillon seems to be suggesting in his numerous examples is that three factors determine population size: natural resources, technology, and cultural factors. (69, 83, 75, 67) Although he uses the term "land" to designate what we today call natural resources, it is clear that the meaning of the term "land"

*All references, denoted by figures in parentheses, are to page numbers in Richard Cantillon, *Essai Sur la Nature Du Commerce en General*, ed. and trans. by Henry Higgs (London: MacMillan & Co., 1931).

as used by Cantillon was quite modern. (3) However, he was primarily interested in the analysis of an eighteenth century agrarian economy, and therefore his examples were mostly those of agricultural land, particularly with differential fertility. Cantillon also recognized that technology would influence population size, and his best example is in the recognition that the colonization of America would not be a simple displacement of people by people but the introduction of a new agricultural technology which would support a larger population per unit of land. (83) Hence technology influences the extent to which existing resources can be utilized.

Cultural factors affect population size in two ways. Religious and other cultural norms may influence the extent of family size, although Cantillon recognizes the propensity to multiply like mice, given resources and technology. (83) The latter qualification is important because it explains how population adjusts to the three factors (resources, technology, and cultural values). For example, in an absolute sense it could not be argued that pre-colonial America was "overpopulated" by Indians, even though there were no apparent cultural constraints on population. The Indian population had simply adjusted to its resources base and technology (essentially hunting and gathering society) as had the *apparently* "overpopulated" Chinese in the Southern provinces of China. In other words, what Cantillon was offering in his examples was a theory of optimum population size.

A second way that cultural factors may affect population size is through product demand, which, in turn, reflects tastes, fads, etc. In this case, it is the tastes of the proprietary class which determine the demand for agricultural products. (75) A change in the demand for products which are more land intensive would tend to reduce the demand for labor, and ultimately cause a reduction in the supply of agricultural labor and population. Indeed Cantillon describes a rational population policy based on variations in product demands having different labor-land intensities.³

Finally, Cantillon pointed out that a country with a poor resource base could increase its population through international trade. (85) He recognized that international trade was equivalent to a transfer of resources (land) from a well-endowed to a poorly endowed nation. However, it is the difference in technology (and culture) between the two trading nations which makes trade possible. (237)

With respect to population theory, Cantillon was more "modern" than such writers as Smith, Ricardo and Malthus. His framework was general enough to account for a variety of circumstances. For example, today we witness a tendency of industrialized nations moving towards a zero rate of population growth because of smaller family size due essentially to cultural change. At the same time, we observe population "explosions" in less-developed countries as these countries adjust to the transfer of technology from industrialized nations. In both cases, however, global resources are being consumed at ever increasing rates, and if technology is unable to provide new utilizable resources as others are depleted, then resource constraints will become real and, if Cantillon is any guide, global population growth

may end or indeed depopulation may take place, as was the case for civilizations of the past.⁴

Value Theory and the Problem of Uncertainty

Cantillon's theory of value is less "speculative" than his theory of population in that the former also reflects his experiences as a merchant. On the one hand, there is Cantillon the "theorist" distinguishing between the traditional exchange value and intrinsic value concepts of his predecessors, and whose contribution was to make those distinctions more explicit. On the other hand, there is Cantillon the speculator-merchant stressing the uncertain nature of entrepreneurial activity, who goes so far as to divide the inhabitants of the state into two classes: entrepreneurs with unfixed wages and "hired people" with fixed wages. The uncertainty aspect of entrepreneurial behavior is all pervasive, whether in the agricultural sector where the farmer bears the risk of fixed costs of production and uncertain prices of output, or for the undertaker or merchant whose activities in distribution and manufacturing cause him to be subjected to similar risks. (50-56)

This uncertain environment in which farmers and undertakers operate result in profits or losses and therefore fluctuations in activity and employment. Professor Spengler argues that "Cantillon did not, however, develop anything like an uncertainty theory of profit. Instead, he thought of profit as a composite gross return and as a supply price that reflected the scale of living characteristic of the relevant entrepreneurial group." (121) If Professor Spengler has in mind a risk theory of profit such as Adam Smith's where part of the undertaker's profits were for risk bearing and the other for interest return on capital, then he is certainly correct.

My impression is that at the level of the *individual* farmer or undertaker, profit or losses were of a purely random character, while for the members of any particular *group* characterized by a diversity of individual expectations a certain degree of stability of profits existed. This distinction between the individually heterogeneous actors' expectations as opposed to the aggregate stability (i.e. less unstable than the individual element) of enterprise is an important insight which has been completely overlooked by later writers, as an important contribution. Instead, a rational theory of profit following Smith became characteristic, with the emphasis on risk and interest return. Eventually this led to a dead-end in the case of Walras (as it did earlier with Quesnay) where the entrepreneur's role is said to be central to production, but he disappears because he is deprived of an environment characterized by uncertainty.⁵ It was only later with Frank Knight, Keynes, and today with modern Austrian theory that the flavor of Cantillon's world of uncertainty is recaptured.

The above is not meant to convey the impression that Cantillon was a precursor of Frank Knight, Keynes, or the modern Austrians, for he did not present a cohesive theory of uncertainty. Instead, he opened the door for a theory of uncertainty, and no one entered, at least not for over one and one-half centuries, and then without any discernible influence on his part. All that can be said for Cantillon in this case

was that he was a pioneer. He was not a pioneer in another sense; he did not link entrepreneurial characteristics to personality types, as did Pareto later in his sociology.⁶

What is perhaps most remarkable is that the problem of uncertainty was essentially ignored in economics for almost two centuries, and when it was finally broached, the approach was largely of a descriptive nature. In recent years, the approaches to uncertainty have been largely of a statistical character, which reduces the problem to subjective probabilities. Although such an approach provides insights from a statistical viewpoint, it is doubtful that entrepreneurial behavior can be captured by such highly simplified models of behavior.⁷

Monetary Theory

Cantillon's contributions to monetary theory are essentially his discussion relating to the determinants of velocity of circulation, which is exhaustive by current standards and his analysis of the differential effects on price levels of injections of money from different sources. Both of these contributions are well-known largely due to Professor Spengler, and there is little to add to here. Instead, I shall examine a neglected aspect of Cantillon's theory of money—its relationship to his theory of value.

From a current perspective, it appears that Cantillon's distinction between exchange and intrinsic value is as dated as it was for Walras and his contemporaries. For Cantillon intrinsic value signifies the amount of land and labor which enter production. “. . . Gold, silver, iron, etc. serve several purposes and have a value proportional to the Land and Labor which enters into their Production.” (107) What is important is that a commodity money, such as gold or silver, will possess an intrinsic value reflecting the amount of land and labor used in its production (97–107), given different qualities of ores. In other words, the intrinsic values of all commodities have a definite basis for measurement in terms of factor inputs necessary to produce one unit of output. In the absence of qualitative changes in the factor inputs the relative intrinsic values do not change. The market value of money (like all other commodities) will sometimes be above or below its intrinsic value depending on conditions of supply and demand.

It follows that when market values differ from intrinsic values, allocative effects take place until the equality is restored (largely due to the activities of entrepreneurs who see profit possibilities since market prices are above production costs). Commodity money, being a commodity, is subject to the same theory of value as other commodities. What emerges is a type of self-regulating monetary view where monetary disequilibrium is a transitory condition.

It would appear that Cantillon's attempt to make commodity money a special case of his value theory is somewhat strained since the supply of precious metals from mines does not adjust quickly to changes in the market price of such metals. In cases where market price is above intrinsic value, monetary disequilibrium could

persist for a long time. Also, since gold and silver production is a small part of the total available supply of precious metals (indeed the storage quality of these two precious metals accounts for their attractiveness as a store of value) then a situation in which market price is below intrinsic value could persist for a long time even if the mines ceased production.

However, one must distinguish, as Cantillon does (261–263), between nominal price of gold in terms of some unit of exchange (in this case gold coins), market price of bullion and intrinsic value of gold. Suppose that initially all three prices are equal, and the market price of bullion falls below the nominal price and intrinsic value. Suppose further that because market price of bullion is below its intrinsic value, gold production ceases. The lower bullion market price will cause gold to be sold at the mint where it will be exchanged for gold coin (which has a higher nominal value). The reduction in the supply of gold bullion will cause its market price to rise until it reaches parity or the nominal price. The equality of market price of bullion and intrinsic value is also reestablished. However, the increase in the quantity of gold *coin* in circulation causes the price level to rise, so the monetary equilibrium is reestablished at a higher price level.

In the above example, there need not be any change in the *velocity* of money (in this case gold coins) to bring about monetary equilibrium. However, if the money supply is defined as consisting of gold coins *and* bullion the above described process would give the impression that the higher price level was the result of an increase in velocity, since the total supply of gold (coin and bullion) did not change. Cantillon seems to use both definitions of money, which is confusing although not necessarily contradictory.

Once government monopoly over token money creation or bank credit is introduced, the above considerations become more complex. Such forms of money have no intrinsic value, but they do possess a market price expressed in terms of gold and silver. Departure of market price of fiduciary money from market prices of commodity money (i.e., departure from par) is a transitory phenomenon because market adjustments both in money markets and commodity markets bring both back to par. The same situation occurs with respect to international exchange rates. (249–267).

Cantillon's insights into the nature of the international exchange rate mechanism are revealing of his experiences as a banker. Nevertheless one wonders what happens to the intrinsic value of gold and silver, and to what extent such a distinction is of any consequence. Cantillon suggests that in equilibrium exchange rates will be regulated by the intrinsic value of specie, or to put it differently if one allows for transport costs of specie, as well as risk of loss, then a balance of trade between two countries implies that the exchange rate between two currencies will be at par, i.e., equivalent to the intrinsic value of the specie. (257)

In summary, the distinction between market prices and intrinsic value is extended to money and exchange rate equilibrium, a refinement which seems to reach its

peak with Cantillon. All this may seem a dead-end in the history of economic thought. Nevertheless, although Walras did not specifically speak of intrinsic value, it should be recalled that commodity money for Walras had a cost of production, so that the relative price of say, gold, in terms of other commodities reflected the resource costs of producing gold versus other commodities *in equilibrium*.

A result analogous to Cantillon's is obtained in the Walrasian system. In such a case, prices, interest rates, etc., expressed "real" (resources) values. However when Walras introduces fiduciary money into his system the monetary sector becomes "unhinged" from the "real" sector, so the distinction between nominal and "real" prices and interest rates must be made. But it is not clear what the relationship between the two sectors is, or what the adjustment mechanism is between both sectors—certainly an ad hoc quantity theory of money, to the extent that it assumes quantities and velocity as constant, tells us very little.⁸

The substance of Cantillon's monetary-value theory remains in Walras' monetary theory. This is not surprising because both writers assumed the existence of a bimetallic system of commodity money with and without fiduciary money. All this would seem to be irrelevant to modern monetary theorists, since commodity money is a relic of the past. But it may be that the absence of what was taken for granted by both Cantillon and Walras is precisely why the world is experiencing the greatest sustained inflation (1932–1980) in history.

It might be worthwhile to explore one other point, not often recognized in Cantillon. If the quantity of money is held constant, as well as the velocity of circulation, then in equilibrium *exchange* values will be proportional to land and labor used in production. If it is further assumed that labor is the major component of cost of production then, depending upon how much weight one wishes to assign to labor costs, one has a corresponding labor theory of value. Of course, this exercise would be contrary to Cantillon, since he did not assume "average" factor proportions for the corn industry or the gold industry or any other industry for that matter, as did Ricardo. It only serves to show that one can derive a labor theory of value from a land-labor theory of value without too much effort if one chooses to do so.⁹

The Self-Regulating Nature of Cantillon's System

What remains to be mentioned is the self-regulating nature of Cantillon's system. Professor Spengler has correctly pointed out that in this regard Cantillon was influenced by his environment and, in turn, helped to influence it.

The self-regulating nature of economic activity is probably the dominant theme of the *Essai*. It occurs at every level of discourse. Market prices of individual commodities adjust to intrinsic values. Wages adjust to supply and demand conditions, as do the number of workers in particular occupations. The regional distribution of merchants and workers adjusts to market conditions. International trade and exchange rates adjust to conditions of supply and demand. Population size adjusts to resource base, technology, and cultural factors.

Although much of Cantillon's analysis is cast with the context of static equilibrium, his discussions and examples very often reflect a description of how adjustments take place from one equilibrium level to another, so that change is an integral part of the context of his framework of analysis. This is particularly the case with respect to the uncertainty characteristic of entrepreneurial behavior.

Although there are some suggestions for rational interventionism in such a system, in general Cantillon's theme is anti-interventionist in specific instances, such as central bank regulation, to non-interventionist as implied in the self-regulating nature of the system. Yet to argue that he was influenced by his environment in this regard is not to detract from him any more than it would be so to argue that modern economists' pro-interventionism is also environmentally induced.

What really is at issue is the degree of confidence regarding the ability of market mechanisms to adapt to changing circumstances in an "acceptable" way. No one doubts this adaptive ability. The key is the term "acceptable." Those who view such changes from the point of view of distributional effects on particular groups, will often support intervention to mitigate such effects (positive or negative depending where their sympathies lie). Such government policies have the effect of modifying behavior. What is often ignored in such cases is the unintended consequence of behavior modification, which brings with it further intervention, and so on. The aggregate impact of many individual policies on the performance of the economic system, as a whole, is unknown. This is why when an economic system is not performing to expectations there is so much dispute regarding the causes of the poor performance.

The realization that no person or group of persons, including government, reasoning from the point of view of the limited information available to him, or it, knows what is best for an economy led most economists subsequent to Cantillon, right up through the nineteenth century, to take the position that there was a presumption against government intervention. This view was rejected in the 1930's, and economists since have flourished as the handmaidens of those inside and outside of government who support greater government intervention. The results have been less than satisfying even for the strongest supporters of this view. Nevertheless, it does not seem likely that the supporters of this view will recant as a consequence of recent policy failures; instead, the response has been for more government intervention.

If and when Cantillon's view will ever prevail again is a matter of conjecture. The fact that history may someday grant to Cantillon his proven reward is little comfort in itself to those among us who see *more* of the present in the future.¹⁰

Conclusion

I have argued that modern economists *should* find four topics discussed by Cantillon of current interest. These are his (1) population theory, which is quite general and accounts for the effects of changes in resources, technology, and cultural factors on population size, (2) the uncertainty aspects of entrepreneurial behavior,

(3) monetary-value theory and (4) themes regarding the self-regulating character of economic activity.

With respect to the first, it is only in recent years we have come to appreciate the interaction of all three factors on population size. In the case of the second, the current state of that topic is best exemplified by the contributions of Kirzner and Lachmann, and others, such as Shackle, largely outside “mainstream” economics. The third is largely ignored and will continue to be ignored as long as commodity money is viewed as a relic of the past. Hence the dichotomy between value theory and monetary theory, with all that it conveys will continue to exist as long as the present views persist. Finally, in the last case, the rejection of the efficacy of a self-regulating market system which occurred in the 1930s, together with the general acceptance of the desirability of controls to mitigate the “undesirable” consequences of free markets is the dominant view among economists. This view is a matter which deserves reconsideration, and Cantillon provides a “neutral” environment for such a reevaluation precisely because he did not belong to the present.

NOTES

1. Joseph J. Spengler, “Richard Cantillon: ‘First of the Moderns,’” *The Journal of Political Economy*, LXII (August-October 1954), pp. 281–95, 406–24; reprinted in Joseph J. Spengler and William R. Allen, eds., *Essays in Economic Thought: Aristotle to Marshall* (Chicago: Rand McNally & Co., 1960), pp. 105–140. All references to Spengler’s article will be within the latter.
2. Richard Cantillon, *Essai Sur La Nature du Commerce en General*, ed. and trans. Henry Higgs (London: Macmillan and Company, 1931).
3. However, Cantillon, *Essai*, p. 85 he concludes that whether it is better to have a large population of poor people or a smaller population of people who are better off is a question outside of the scope of his analysis: an early example of the distinction between positive and normative theory.
4. An intriguing aspect of Cantillon’s ideas on population is his almost matter of fact observation that population decline occurred with the decline of many ancient civilizations, the most notable being Rome, whose population in Italy declined from 26 million to about 6 million in seventeen centuries.
5. In the case of Walras, the entrepreneur’s function is reduced to a mechanical accounting one. Cf. Leon Walras, *Elements of Pure Economics*, trans. William Jaffee (Homewood, Ill.: Richard D. Irwin, Inc., 1954), pp. 235–36.
6. In this sense, Pareto attempted to accomplish what Walras was unable to do because of the framework of his static equilibrium analysis. However, Pareto did not deal with the problem of entrepreneurial behavior in his economics, but in his sociology. The reason was that entrepreneurial behavior is a special case of “innovative” behavior which cuts across all facets of concrete behavior, military, political, religious, etc., as well as economic. What Pareto did was to abstract from the concrete manifestations and analyze the activities of personality types reflected in the specific categories. The appropriate place to do this was in his sociology rather than in his economics. Vilfredo Pareto, *The Mind and Society*, trans. and ed., A. Livingston (4 vols.; New York: Harcourt, Trace and Co., 1935).
7. Pareto’s approach has been ignored by economists because it lies outside the scope of economics, as it is currently defined. The Austrian approach possesses the merit of realism, but has been essentially descriptive rather than analytical. Keynes’s *Treatise on Probability*, has not received much atten-

tion among economists and it is more philosophical in its orientation, although there are some loose points of correspondence between his approach and modern Bayesian procedures with their emphasis on prior probabilities. Cf. R. B. Braithwaite, "Keynes as a Philosopher," in Milo Keynes, ed., *Essays on John Maynard Keynes* (London: Cambridge University Press, 1975), pp. 237-242.

8. Walras committed the error of assuming that the introduction of fiduciary money involved simply adding an additional equation and an additional unknown to his system of equations. Mathematically, this procedure was correct, but economically, the nature of the system changed, since it became dichotomized between its monetary and real sectors. The quantity theory determines the absolute level of prices and relative prices reflect "real" conditions. Changes in the former are not presumed to have allocative effects where the latter are presumed to do so. But the neutrality of money doctrine rests upon some very restrictive assumptions about the nature of production, namely, product exhaustion must take place. Even under conditions of free competition the latter may not occur, as Pareto showed.
9. This may not be as arid an exercise as it may appear to be, for it points to the highly restrictive nature of the labor theory of value, where land is assumed away (but not capital, because capital is defined as congealed labor, yet no mention is made of land as a component of capital).
10. Those who believe that public sentiment regarding government intervention will change as a consequence of "reason" are committing the same errors of the nineteenth century liberals who believed that the "obvious" merits of laissez-faire, together with "education," would assure a movement in that direction.

Richard Cantillon—A Man of His Time: A Comment on Tarascio*

by David O'Mahony

Dept. of Economics
University College, Cork

Professor Spengler refers to Richard Cantillon as the first of the moderns. Professor Tarascio presents him from a current perspective. But it was the world as he knew it that Cantillon sought to explain. Inevitably he was a man of his time and it is primarily in that light that I should like to look at him. In so doing I shall concentrate on three of the topics with which Professor Tarascio deals, namely, value, money, and the entrepreneur.

I.

Cantillon portrays the world as he knew it vividly, if briefly, in the early chapters of the *Essai*. Above all it is a world of landed estates. The French Revolution was still over fifty years away and the property rights and privileges of the nobility were not only respected but accepted almost as part of nature itself. Since, as Cantillon sees it, land is “the Source or Matter from whence all Wealth is produced” (3) and since the land is divided up into estates everything derives from the landed estates and everything depends on them.

The Prince and the landowners alone are “independent.” Of course they need the farmers, labourers, artisans, and undertakers just as these need the proprietors. They are independent in that they alone have the “disposition and direction of the landed capital” and are able “to give the most advantageous turn and movement to the whole” in accordance with their “fancy, methods and fashions of life.” (47) Hence they are neither hired and told directly what to do, nor do they have to “portion themselves to demand” (53) and be told indirectly what to do.

It is also a world of villages, market towns, cities, and capital cities. But they all owe their existence and purpose to the landed estates—the property of the landowners and the “fountain-head” from which everything flows. (45)

*All references, denoted by figures in parentheses, are to page numbers in Richard Cantillon, *Essai Sur La Nature Du Commerce En General*, ed. and trans. by Henry Higgs (London: Macmillan and Co., Ltd., 1931).

The world that Cantillon describes seems very antique indeed. But trade had already become general, so general that even the farmer produced for the market. (49, 61) Already, though it was only the early eighteenth century, the interconnected and interrelated markets through which trade was carried on had become the ordering principle of the whole complex of activities extending from the estates of the landowners to the capital cities and even beyond the frontiers of the State. This is what Cantillon saw.

II.

In view of the decisive importance of the great landed estate in the society and economy of his time it is not surprising that it enters into Cantillon's method of analysis. He uses it to good effect when he wishes to bring out the essential nature or essence of the phenomena he is analyzing. It may be said to constitute for him what we would now call a model with the aid of which he is able to lay bare the basic elements and relationships that go to make up economic activity. Moreover, in using the great estate as his "model" he can be sure that his readers will easily follow his reasoning as he proceeds from the familiar to what is going on beneath the surface.

In what might be called the first version of his model he assumes that there is but one great estate in the world. He further assumes that the owner cultivates it himself in the sense that he hires all those he needs to do what he wants done. He follows "his fancy" in the uses to which he puts the land. These uses dictate the number and kinds of labourers, artisans, and others he must employ and so also the amount of land he must set aside to produce food, clothing, and other commodities "according to the way he wishes to maintain them." (59) For the rest he will *turn his land into parks, gardens, and the like for his own pleasure*. Obviously, in such a case the owner determines everything that is done on the estate. In particular what is produced is what he wants to be produced. There is no other production. The owner's wishes alone count.

What Cantillon is doing here is putting it beyond question that everything depends on the wishes of the proprietors. On the assumptions he is making, it could not be otherwise. His proposition regarding the central determining position of the landowners becomes incontrovertible. In more general terms what he is doing by means of this first simple model is to establish that the pattern and direction of production depend on demand.

Next he modifies his initial model and makes it considerably more realistic by assuming that the proprietor makes a bargain with his "overseers" as a result of which the "overseers of the labourers" become "farmers or undertakers," the "overseers of the mechanics" become master-craftsmen and undertakers and so on. Otherwise everything goes on as before. The reason everything continues as before is that Cantillon supposes that the demand of the proprietor remains

unchanged. He still follows his fancy but because his fancy is unchanged nothing else changes. If anything did change, if, for example, the farmers sowed more corn than usual, a corrective process would come into play which would cause the previous routine to be re-established. But if the owner were to change his mode of living then the pattern of output would also be changed to correspond with the new patterns of demand. Labourers and mechanics live from day to day and change their mode of living "only from necessity." (63) Well-to-do people such as farmers or master-craftsmen may be in a position to change their consumption habits but they do so only in imitation of the lords whom they follow in regard to clothing, food, and "mode of life." (63)

Accordingly, there is no fundamental change in the capacity of the proprietors to determine demands when the assumption that the proprietor cultivates the estate himself is dropped. As Cantillon puts it:

"If all the Landowners of a State cultivated their own estates they would use them to produce what they want; and as the variations of demand are chiefly caused by their mode of living the prices which they offer in the Market decide the Farmers to all the changes which they make in the employment and use of the land." (65)

But Cantillon uses the modified model to do a lot more than emphasize that the demand of the proprietors remains decisive. It emerges that the centralized management of the estate is abandoned because of the "care and trouble" involved. (59) It also emerges that exchange and trade and competition now arise and that these, in turn, require the use of money both as a measure of value and a medium of exchange. Moreover, it becomes clear too that production does not adjust of its own accord to demand. The centralized decision-making of the proprietor has to be replaced by another form of decision-making so as to ensure that supply is in fact adjusted to demand. This need is met by the undertakers. Thus, by employing the great estate as an analytical device Cantillon is able to reveal the essential features of economic activity in a way which would be easily understood by his contemporaries. The contrast between the first and second version of his model is almost dramatic in its impact and could hardly fail to convince his readers that there was more to the nature of trade than met the eye.

III.

If I understand Professor Tarascio correctly he interprets Cantillon's views as to the relationship between market price and intrinsic value as a cost of production theory of value. Certainly many of Cantillon's statements could be cited in support of this interpretation of Cantillon's position. But it is also possible to see another side to it.

Cantillon always argues that market price is determined by demand given the stock of the commodity on offer for the time being. "It is clear," he says, "that the quantity of Produce or of Merchandise offered for sale, in proportion to the

demand or number of Buyers, is the basis on which is fixed or always supposed to be fixed the actual Market Prices . . . ” (119) In the famous example of the green peas he is even more explicit. (121) Demand in turn, as he says repeatedly, depends on humour, fancies, mode of living, and the like. And he seems to contend that it is these humours and fancies that ascribe value to things. It is the “consent of mankind” which gives a value to “Lace, Linen, fine Cloths, Copper and other Metals” just as it does to gold and silver. (113) None of these things is essential. People could subsist without any of them. (113) But they choose not to, and by so doing ascribe value to them.

In another example he refers to an American who sells beaver skins to a European and who is “rightly astonished to learn that woolen hats are as serviceable as those made of beaver, and that all the difference, which causes so long a sea journey, is in the fancy of those who think beaver hats lighter and more agreeable to the eye and the touch.” (237)

In Chapter X, the title of which is “The Price and Intrinsic Value of a Thing in general is the measure of the Land and Labour which enter into its Production,” he says that the price of a pitcher of Seine water is nothing because there is an immense supply of it but that in the streets of Paris people will pay a sol for it and that is “the price or measure of the Labour of the Water-carrier.” (29)

What all this seems to amount to is that people value things in accordance with their humour and fancies and that this is what decides the prices they will be willing to offer. Now, if in Cantillon’s view, these prices in conjunction with the stock on offer determine actual market prices, could it be said that he holds a cost of production theory of value? It is true that he says that market prices are sometimes above and sometimes below intrinsic value. It is also true that intrinsic value is clearly to be understood as cost of production or the outlay incurred on the labour and natural resources involved in production. But does this mean, as Professor Tarascio seems to imply, that the intrinsic value is a kind of equilibrium price to which the market prices are always tending?

If intrinsic values were to determine prices in the sense that market prices tended to be brought back to intrinsic values when they departed from them, Cantillon’s great estate model could not do what it was obviously intended to do, that is, explain what happens in the world in general. It would hardly be possible for the proprietor to vary the pattern of output by the prices he offered if it was the cost of production which ultimately determined the prices. Rather it is the other way around as, in fact, Cantillon on several occasions quite explicitly states.

In the example of the Brussels lace, no more than in that of the Seine water, he could hardly be more clear. The lace example is worth quoting *in extenso*:

“If the price which the Ladies pay for the Lace does not cover all the costs and profits there will be no encouragement for this Manufacture, and the undertaker will cease to carry it on or become bankrupt; but as we have supposed this Manufacture is continued, it is necessary that all costs be covered by the prices paid by the Ladies of Paris . . . ” (227)

Again, in another passage he says that gold and silver “like other merchandise and raw produce can only be produced at costs roughly proportionable to the value set upon them.” (113)

It seems then that Cantillon’s position is that if prices do not cover costs and thereby enable the labourers and undertakers to enjoy their customary standard of living, it is not that prices must change in the direction of intrinsic values but that the labourers and undertakers will go into other lines of activity. If things do not fetch their intrinsic values they simply will not be produced. For Cantillon, production does not continue automatically. But because all things that continue to be produced do afford a “living” to those producing them and because this “living” is the maintenance of the labourers and undertakers, it can be said that all things tend to be priced in proportion to their intrinsic values as long as production is fully adjusted to demand. The fact that prices may sometimes be above and sometimes below intrinsic values merely indicates that resources have not yet been moved fully into or out of particular lines of production rather than that the intrinsic value is the centre around which prices fluctuate. Given the independent determining role of the proprietors this conclusion seems inescapable. To hold otherwise would destroy Cantillon’s whole concept of adjustment through the medium of the undertakers or entrepreneurs who for him perform this essential function.

The entrepreneurs have to adjust production continuously to meet demand at the prices offered. For Cantillon then it is not so much that intrinsic values exist automatically and spontaneously and that market prices are drawn towards them, as that the prices offered in the market determine whether or not it is worth producing things. In other words, it is the prices offered that determine what production costs can be incurred not that production costs determine what the prices must be.

IV.

Can the foregoing interpretation of Cantillon’s approach to value and price be applied to his views regarding the value of gold and silver, the commodities used as money in his time?

His discussion of “imaginary value” might appear at first sight to support a cost of production interpretation in the case of commodity money. He says:

“Money or the common measure of Value must correspond in fact and reality in terms of Land and Labour to the articles exchanged for it. Otherwise it would only have an imaginary Value. If, for example, a Prince or a Republic gave currency in the State to something which had not such a real and intrinsic value, not only would the other States refuse to accept it on that footing but the Inhabitants themselves would reject it when they perceived its lack of real value. When towards the end of the first Punic War the Romans wished to give the copper *as*, weighing two ozs., the same value as the *as* of 1 lb. or 12 oz. had before, it could not long be maintained in exchange.” (111, 113)

But what he seems to be saying in this passage is no more than that the face value of a debased currency is imaginary in the sense that it is greater than the

market value of the metal of which it is made. This value, in turn, determines how much land and labour it is worth using to produce a certain number of coins; if the copper producers incurred an expenditure on labour and land equal to the nominal value of the coins in producing the quantity of copper in question they would be at a loss because what they would realize from the sale of the copper would be less than what it cost them to produce it—that is to say, less than its intrinsic value. Accordingly, it does not seem that this passage implies a cost of production theory of gold and silver.

Moreover, as we have already seen, Cantillon says that gold and silver can only be produced at costs roughly equivalent to the value set upon them—just like all other commodities and that it is the consent of mankind which has given its value to these two commodities.

He is even more forthright when he discusses the relationship between the value of gold and silver. “It is the market price,” he says, “which decides the ratio of the value of gold to that of silver. The Market price is the base of this proportion in the value assigned to coins of gold and silver. If the market price varies considerably, that of the coinage must be reformed to follow the market rate.” (279, 281) In the same vein in a later passage he emphasizes that only “the market price can find the ratio of the value of gold and silver as of all other values.” (287)

This interpretation is still further reinforced by the fact that fiduciary money, as Professor Tarascio points out, has a market value but no intrinsic value. If the value of gold and silver is not determined by cost of production then the value of fiduciary money poses no new problem and does not make matters more complex, as Professor Tarascio argues it does.

Professor Tarascio points out that the market price or purchasing power of gold and silver and their cost of production converge through changes in velocity of circulation rather than through changes in supply. But this again does not imply that there is any radical difference between money and other goods since a change in velocity is equivalent to a change in supply. There is no need for a change in the physical supply of gold and silver if the same result can be produced in some other way which alters the proportion between active and inactive balances.

Cantillon observes that the abundance “of fictitious or imaginary money has the same effect as an increase in the circulation of real money” but that this abundance vanishes if confidence is jolted and that this in turn precipitates disorder. (311) However, in some cases this kind of money is used only to buy stocks and shares so that it has no effect on prices generally and seems only to change the rate of interest. Hence the effect of this kind of money, as in the case of “real” money would depend on how it is used. Nevertheless, Cantillon regards the ability to expand fictitious money as a temptation and a danger particularly, it would seem, for Ministers of the government. They have rarely, if ever, been able to overcome this temptation. In our day the dangers of succumbing to it are even greater than in Cantillon’s because the abundance of “fictitious” money does not vanish now

when confidence is jolted. This is why, as Professor Tarascio reminds us, we have been experiencing the greatest sustained inflation in history in our time.

V.

Cantillon's insights regarding the reasons for the existence of the undertaker and his role in economic activity can perhaps best be appreciated by contrasting once again the first and second versions of his model of the great estate.

In the first version the proprietor directs the whole estate himself. He employs overseers to manage the day-to-day work of the labourers and artisans. But he decides what they are to do and how the land is to be used. Everything is done on his direct instructions. There is uncertainty, of course, but it arises only because of natural forces such as the weather as a result of which harvests may be good or bad or from accidental circumstances such as the presence of foreign troops. (65) But as there is no trade and no competition the particular kind of uncertainty associated with the market process does not exist and so there is no entrepreneurship.

But in the second version, while the demand of the proprietors, and now also of those who emulate them, is paramount, their instructions are conveyed indirectly *via* the prices they are willing to offer in the market. These prices cannot be foreseen with certainty so the overseers, now become undertakers, have to use their judgement as to what will pay best. (49) What distinguishes the first and second versions of the model, therefore, is that centralized decision-making regarding the use of resources has been replaced by decentralized decision-making. And the entrepreneurs are the decision-makers in this respect. It is they who now direct human and natural resources into and out of particular lines of production in response to changes in demand and on the basis of what they judge will pay best. Thus, the primary role of the entrepreneurs is to adjust economic activity in response to changes in demand.

But this is not their only role. They are still overseers. They continue to be responsible for the management of the day-to-day affairs of their businesses. It will be recalled that the entrepreneurs come into existence in the first instance when, and because, the proprietor wishes to avoid the "care and trouble" of running the estate himself. (59) When they take over from him they "will have more care and satisfaction in working on their own account." (61) So, presumably, they will run things better than when they were mere overseers hired by the owners. It is tempting to suggest that the proprietor decides to divest himself of "so much care and trouble" (59) because it is too difficult, or even impossible, for him to confine all decision-making to himself once the estate becomes large and complex.

Cantillon very clearly explains in chapter XIII of Book I why it is that the entrepreneurs always do business "at a risk." It is invariably because the prices at which goods and services are sold vary from place to place and from time to time for a variety of reasons and cannot be foreseen precisely. Entrepreneurs, other than entrepreneurs "of their own labour," (53) must buy things before they re-sell them

in a different place and/or form. The money they laid out is over and done with and as far as they are concerned "fixed." What they will get eventually is not fixed so their income is not fixed either. It is a residual. Thus, Cantillon perceives that under market conditions some incomes must be in the nature of a residual and that one of the entrepreneurial roles is to accept responsibility for this residual-bearing function.

Cantillon does not explain how or why competition emerges. He simply takes its existence for granted and regards it as an important source of uncertainty for the entrepreneur. (51) He clearly understands, as the example of the silver mines shows, that it keeps prices down by preventing entrepreneurs from being able to charge "arbitrary prices." (99, 100)

For Cantillon, then, uncertainty arises not only because of natural forces and accidental circumstances, but also because of the nature of the market process itself. The market which he sees as emerging in place of centralized decision-making makes the entrepreneurial functions necessary. If the proprietor ceases to make all the decisions himself and confines himself only to indicating his demands through the prices he is prepared to offer, some way has to be found by which the requisite decisions will be made which will ensure that the wishes of the proprietors, and of those who follow them, will be catered for. The entrepreneur plays this role. In doing so he is continuously adjusting to the changes that are taking place in accordance with his judgement. These changes are the source of the uncertainty and risk that surround him and which distinguish him from the proprietor on the one hand and from those who are hired on the other.

Cantillon is obviously very conscious of the uncertainty that pervades the activities of the entrepreneurs. Yet it did not require any great insight on his part to see that uncertainty is all-pervasive. It must have been obvious to him at every hand's turn. To acknowledge his recognition of uncertainty when we look at him as Professor Tarascio does from a current perspective is thus more of a reflection on many modern economists whose capacity to ignore uncertainty is nothing short of bizarre than a tribute to Cantillon's prescience.

One must, of course, agree with Professor Tarascio's doubt regarding the capacity of simplified models of behaviour to capture entrepreneurial behaviour. Indeed, one might well go further and ask if entrepreneurial activity can in the nature of things be made the subject of formal representations or models at all. If they could, would there be any room for uncertainty, in the true sense of the term, and, therefore, any room for entrepreneurship itself?

VI.

Cantillon's *Essai* is an attempt to explain the world as he knew it. From our perspective it seems a distant and quaint world. Yet it already had many of the characteristics of our world so that, as Professor Tarascio shows, we can usefully examine Cantillon's work from our current perspective.

Above all, what Cantillon grasped was that to explain his world and to show how its apparently disparate elements constituted an integrated rational whole, one had to turn to a study of the nature of trade which already by the early eighteenth century held the secret to the understanding of what superficially looked like a chaotic jumble of activities. Can we do better if we wish to understand our world?

Was Richard Cantillon an Austrian Economist?

by Robert F. Hébert

Auburn University

Introduction

Can anyone take seriously the question posed by the title of this paper? History clearly reveals the following facts. Austrian economics began in 1871 with the pioneer work of the Viennese economist, Carl Menger. Cantillon's *Essai sur la nature du commerce en général* was written almost 150 years earlier. It remained virtually undiscovered until reintroduced to economists by W. S. Jevons in 1881. There is definitely no chronological link between Cantillon and Menger, and any intellectual connection is speculative.

Nevertheless, there is a sense in which this question can be taken quite seriously. It can be demonstrated that the Austrian tradition in economic analysis—began in the last century by Menger and maintained in our own by von Mises, Hayek, Kirzner, and others—has quite a lot in common with the economics of Richard Cantillon. This fact generally has not been recognized by historians of economic thought and, indeed, not always by Austrian economists.

Austrian economists have often claimed that their analytical tradition shares more with the main trunk of eighteenth-century classical economics than with the neoclassical branch that subsequently grew from it. This claim is undoubtedly a source of confusion for economists accustomed to treating Menger as a *founder* of neoclassicism. The confusion can be traced in part to a widespread inclination to treat Jevons, Menger, and Walras as intellectual substitutes in the history of economic analysis.¹ It is also the case that there have been few attempts to ground the tenets of Austrian economics in pre-Mengerian writings. This paper makes tentative amends in the last regard by identifying and examining certain filiations between Richard Cantillon and present-day defenders of the Austrian tradition.

Cantillon's *Essai* represents the state of the art of economics before Adam Smith. It is a general treatise of penetrating insight and remarkable clarity, features that have not been dimmed by the passage of time. It contains a theory of costs and production, a theory of value and distribution, and a theory of money and credit. Unlike the more narrow treatises of a later age, the *Essai* does not employ a closed-

economy model by abstracting from foreign trade, nor does it treat population as an exogenous variable. For reasons that are not entirely clear, however, certain themes of Cantillon's analysis were subsequently lost in the development of British classical and neoclassical economics. Ironically, three such themes eventually became building blocks in the edifice of Austrian economics.² The three themes that bring Cantillon's economics into close contact with Austrian economics are (1) Cantillon's view of the market system and its operation, (2) the central and critical role of the entrepreneur in Cantillon's analysis, and (3) the influence of monetary changes on relative prices in a market economy.

The Market System

Cantillon conceived of an economy as an organized system of interconnected markets that operate to achieve a kind of equilibrium. The institutions of this organized system evolve over time in response to "need and necessity,"³ which in turn binds all inhabitants of a society into "a network of reciprocity."⁴ The system is kept in adjustment by the free play of self-interest; the motive force of the economy is provided by a class of entrepreneurs who conduct "all the exchange and circulation of the State."⁵ Considering the age in which Cantillon wrote, the Prince is given a remarkably low profile, a fact betraying Cantillon's conviction that a market system works best without interference from government. Entrepreneurs, like other market participants, are bound in reciprocity, as they "become consumers and customers one in regard to the other."⁶ Their number is therefore regulated by the number of customers, or total demand, for their services and their decisions are made under conditions of uncertainty about the future.

The structure of this economic system is hierarchical. Landlords sit atop the economic and social order and are represented as financially independent, although they derive income from the inhabitants of a State who, in turn, rely on the proprietors to supply natural resources in production. Private property rights are deemed essential to the successful operation of a system of markets.⁷ Entrepreneurs occupy the middle rank in Cantillon's hierarchy, but—as explained in the next section—their role is vital and pervasive. It is they who continually react to price movements in specific markets in order to bring about a tentative balance between particular supplies and particular demands.

Seeing the economy as a network of reciprocal exchanges, Cantillon provided one of the clearest early explanations of market price. However, his notion of *intrinsic* value (the measure of the quantity of land and labor entering into production with regard to the quality of the two inputs) has quite possibly been a red herring in the history of economic analysis. There seemed little doubt in Cantillon's mind that market price depends on factors other than "real costs," some of which are subjective. Thus he wrote,

it often happens that many things which actually have this intrinsic value are not sold in the market at that value: that will depend on the humors and fancies of men and on their consumption.⁸

Another reason why market prices may be different from intrinsic values is that the plans of producers and their customers may be uncoordinated. Indeed, it would appear impossible to achieve *perfect* coordination. Cantillon observed that

[t]here is never a variation in intrinsic values, but the possibility of proportioning the production of commodities and merchandise in a State to their consumption causes a daily variation, and perpetual ebb and flow of market prices.⁹

An Austrian view of competitive price determination stresses the subjective evaluations of buyers and sellers and the information possessed by those who participate in exchange. The *process* of individual adjustment to changes in market data provides the focus of attention in this view rather than the end-state of equilibrium. According to Hayek, for example, the assertion that a tendency toward equilibrium exists “can hardly mean anything but that . . . the expectations of the people and particularly of the entrepreneurs will become more and more correct.”¹⁰ Hayek sees the price mechanism as an information-transmitting device in a decentralized market economy. Under certain assumptions, this transmittal of information improves coordination of the plans of market transactors. Coordination may never be perfect, however, because information is never perfect in a world of uncertainty. Hayek concludes that the central problem of economics is to explain how “the spontaneous interaction of a number of people, each possessing only bits of knowledge, brings about a state of affairs in which prices correspond to costs”¹¹

I am aware of the pitfalls of forcing Cantillon into a Procrustean bed of Hayek’s making, but apart from the latter’s important epistemological contributions, it seems to me that both writers had a similar objective. The bargaining process described by Cantillon reflects the information possessed by market participants and the degree of coordination of individual plans. Cantillon even described how disparate plans tend to drive prices away from costs (i.e., intrinsic value).

If the farmers in a State sow more wheat than usual, that is to say, much more than is needed for the annual consumption, the real and intrinsic value of the wheat will correspond to the land and labor which enter into its production; but as there is an over-supply and there are more sellers of wheat than buyers, the market price of wheat will necessarily fall below the cost or intrinsic value. If, on the contrary, the farmers sow less wheat than is needed for consumption there will be more buyers than sellers and the market price will rise above its intrinsic value.¹²

One has only to substitute the word “natural” in place of “intrinsic” to appreciate how close this analysis comes to Adam Smith’s, and if Cantillon had gone no farther, he would have thus provided an important description of the price mechanism. That he did go farther is to his credit, for he provided a rudimentary

explanation of the network of price signals that serve to connect different markets. The following passage is rich in suggestions of self-interest as a motive force, relative prices as signals to adjust resource use, and opportunity costs as a basis of economic decision making.

For if some of the farmers sowed more grain than usual on their land they would have to graze a smaller number of sheep and would therefore have less wool and mutton to sell. Consequently there will be too much grain and too little wool for the consumption of the inhabitants. Wool will therefore be dear and this will force the inhabitants to wear their clothes longer than usual; and there will be too much grain and a surplus for the following year . . . the farmers . . . will take care the following year to have less grain and more wool, for farmers always seek to use their land for the production of those things that they think will bring the highest market price. But if the next year they have too much wool and too little grain for the demand, they will not fail to change from year to year the use of the land until they have adjusted their production more or less to the consumption of the inhabitants. So a farmer who has adjusted more-or-less his output to the demand, will have part of his farm in grass, for hay, another part in grain, another in wool, and so on, and *he will not change his plan unless he sees some considerable change in the demand.*¹³

Is it a strained reading of this passage to conclude that it demonstrates how initially incompatible plans between buyers and sellers become mutually compatible over time by self-interested adjustments to changes in relative prices? If not, then there is fundamental consistency between Cantillon's argument and the Austrian view of the nature and behavior of the price mechanism.

Competition and Entrepreneurship

The modern, neo-Walrasian theory of competition has come under severe criticism by Hayek and Kirzner.¹⁴ Insofar as neo-Walrasian economics has as its underlying purpose the precise and rigorous description of the quantitative nature of equilibrium, it has ignored the *process* of market action that has commanded the attention of Austrian economists. The former analytical tradition has consistently been preoccupied with a unique equilibrium *result* derivable from a similarly unique set of market *circumstances*. Historically, the intellectual hunting ground for this orderly and systematic connection between market circumstance and market result has been the classical conception of competition—which its authors hardly conceived of as “perfect,” either in theory or in practice. In order to accommodate the notion of a rivalrous process to the stringent requirements imposed by a rather simple form of (Walrasian) mechanics, the realistic images of competitive behavior presented by earlier writers such as Cantillon and Smith were systematically replaced by ideal constructs that gradually placed more and more emphasis on such assumptions as perfect knowledge, perfect mobility of resources, infinitely large numbers of competitors, price uniformity, product homogeneity, and so forth.

All of these assumptions gave the competitive “model” neat mathematical properties, but on the face of it had nothing to do with the process of rivalry that inhered

in the classical notion of competition. Thus Austrian criticism of neo-Walrasian competition is that it has misdirected economic analysis into unrealistic and (somewhat) unproductive channels.¹⁵

The affinity that the Austrian theory of competition has with Cantillon's theory can best be understood by examining the role of the entrepreneur.¹⁶ For Israel Kirzner, there is no separation of competition from entrepreneurship—the competitive market process is essentially entrepreneurial.¹⁷ Cantillon's view, though not so explicitly stated, is compatible with Kirzner's.

Cantillon was among the first economic writers to conceive of an economy in terms of classes of individuals, each defined by a major economic *function*. The three classes he identified were landlords, laborers, and entrepreneurs. What set the last class apart from the other two was the fact that its members *lived at uncertainty*. To take but one example, that of the farmer-entrepreneur, Cantillon wrote:

Who can foresee the number of births and deaths of the people in a State in the course of a year? Who can foresee the increase or reduction of expense which may come about in the families? And yet the price of the farmer's produce depends naturally upon these unforeseen circumstances, and consequently he conducts the enterprise of his farm at uncertainty.¹⁸

Thus, lack of perfect foresight on the part of market participants in Cantillon's system gives rise to the entrepreneurial function. Moreover, the entrepreneur is as conspicuous in Cantillon's economic system as he is in Kirzner's. Cantillon held that "all the exchange and circulation of the State is conducted by the medium of these entrepreneurs."¹⁹ Thus, if competition inheres in the nature of market exchange, as in Cantillon's view, it must therefore be inseparable from entrepreneurship.

One very modern aspect of Cantillon's theory is that it deals with the function rather than the personality of the entrepreneur. For Cantillon, the function of an entrepreneur is to assume the risk of uncertainty inherent in market activities. Among Austrian economists, this same line of reasoning has been followed by von Mises. However, von Mises overcame an element of myopia in Cantillon's treatment of entrepreneurship. Cantillon regarded landlords and certain laborers as somehow exempt from uncertainty. He argued that landlords receive fixed, contractual rents as long as they retain ownership in the land; that laborers receive fixed, contractual wages as long as they hold their jobs; that entrepreneurs buy at certain prices to sell again at uncertain prices.

Like Cantillon, von Mises saw the entrepreneur as "acting man exclusively seen from the aspect of the uncertainty inherent in every action."²⁰ But for von Mises, the concept of entrepreneurship transcends class distinctions. He refused to exempt landlords and laborers from uncertainty, asserting instead that "no proprietor of any means of production, whether they are represented in tangible goods or in money, remains untouched by the uncertainty of the future." Thus, von Mises "democratized" the concept. In his own words, entrepreneurship "is inherent in every action and burdens every actor."²¹

While von Mises effectively widened Cantillon's vision of entrepreneurship, Kirzner's treatment of the concept narrowed it once again, albeit in an interesting and provocative way. For Kirzner the essence of entrepreneurship is *alertness* to profit opportunities, its *modus operandi* consisting of arbitrage. Kirzner's entrepreneur-arbitrageur, unlike von Mises' entrepreneur-speculator, requires no capital of any sort—human, physical, or financial. Nor does he require any imagination in order to fulfill his function. He must simply be alert to hitherto unnoticed opportunities, so that he “sell(s) for high prices that which he can buy for low prices.”²²

Recently, Lawrence H. White has argued that Kirzner's theory slights the uncertainty bred by time. White charged that Kirzner does not distinguish sufficiently between arbitrageurship and entrepreneurship.²³ Arbitrage deals with present, known opportunities to exploit price differences that exceed transactions-transfer costs over time or space. On the other hand, uncertainty exists solely in the future. By confining entrepreneurship to the exercise of arbitrage, Kirzner downplays the importance of uncertainty in defining the entrepreneurial role. The result is that Kirzner's theory is asymmetrical, focusing on the entrepreneur's prospects for earning profit and neglecting his chances of suffering economic losses.

Ironically both views—that of von Mises, the “plumb-line” of modern Austrianism, and of Kirzner, the former's protege—find partial justification in Cantillon's early treatment of entrepreneurship. Cantillon held that capital is not essential to the entrepreneurial function, but he did not go so far as to conceptualize Kirzner's “pure and penniless entrepreneur.” Indeed, for Cantillon, some element of human capital seems necessary to replace other capital, if the latter is missing. At least that is one interpretation that can be placed on Cantillon's observation that, excepting those on fixed rents and wages,

all the rest are entrepreneurs whether they set up with a capital to conduct their enterprise, or are entrepreneurs of their own labor without capital, and they may be regarded as living at uncertainty; even beggars and robbers are of this class of entrepreneurs.²⁴

Elsewhere, Cantillon listed arbitrage among activities that occupy entrepreneurs. Noting that price differences between Paris and the countryside tend to create profit opportunities, Cantillon remarked that

entrepreneurs . . . will buy at low price the products of the villages and will transport them to the Capital to be sold there at a higher price; and this price difference will of necessity pay for the upkeep of the horses and drivers, as well as the profit of the entrepreneur, without which he would terminate his enterprise.²⁵

At the periphery, Cantillon's views on entrepreneurship and competition seem to be of a piece with Kirzner's. Both see the market system as composed of interacting decisions of consumers, resource owners and entrepreneur-producers. Neither perceives any logical separation of competition and entrepreneurship; each sees the market process as competitive insofar as it proceeds by the continuous and

repeated efforts of rival entrepreneurs to outstrip one another in providing attractive buying and selling opportunities to market participants. Both trace the origin of the entrepreneurial function to lack of foresight and both regard the entrepreneur as the driving force in the market process of equilibration.

At base, however, a fundamental difference emerges regarding the nature of the entrepreneurial role. The most consistent picture of the entrepreneur that emerges from Cantillon's writings is that of a person who faces uncertainty and bears the risk of that uncertainty in the marketplace. This requires that entrepreneurs possess certain assets or have access to certain assets through credit arrangements. There seems to be no other way in which the entrepreneur can be meaningfully exposed to risk. In the end, therefore, Cantillon's entrepreneur bears a closer resemblance to von Mises' entrepreneur than to Kirzner's.

Modern theories of entrepreneurship that flow from a Misesian conception, such as those of Kirzner and T. W. Schultz,²⁶ find a more solid historical foundation in Cantillon than in either J. B. Say (who must have known of Cantillon's work, at least indirectly through the Physiocrats) or Joseph Schumpeter (who was trained in the Austrian tradition at the University of Vienna). In Say's doctrine entrepreneurial behavior embraces several kinds of economic activities: planning, organization, supervision, innovation, and the supply of capital. There is no evidence that Cantillon regarded any of these activities as inherently entrepreneurial. For his part, Schumpeter's entrepreneur acts to *disturb* an existing equilibrium situation and thereby disrupt economic interactions. By contrast, Cantillon's entrepreneur promotes equilibrium by making the kinds of adjustments that will bring into balance particular quantities demanded and supplied.

The Effect of Money on Prices and Production

The most overt filiation between Cantillon's analysis and Austrian economics concerns the influence on prices and production of changes in the money supply. Hayek inaugurated his critical series of economic lectures at the University of London in 1930 with a commendatory quotation from Cantillon, one in which the author was critical of Locke for dealing with effects rather than causes and principles.

Mr. Locke lays it down as a fundamental maxim that the quantity of commodities and merchandise in proportion to the quantity of money serves as the regulator of market prices [H]e has clearly seen that the abundance of money makes everything dear, but he has not considered how it does so. The great difficulty of his research consists in finding out in what way and in what proportion the increase in money raises the prices of things.²⁷

Cantillon's researches—the quantitative dimensions of which have unfortunately been lost to us—convinced him that the relation between money and prices was not the direct one so often assumed by “naive” versions of the quantity theory. He had no trouble distinguishing between relative prices and a price level; and

he reasoned, correctly, that the effect of monetary changes on relative prices depends on where the new money enters the economy and into whose hands it passes first. If the increased money comes into the hands of spenders, they will raise expenditures on certain goods, driving up the prices of those items. Since some goods will likely be purchased more than others, "according to the inclination of those who acquire the money,"²⁸ relative prices will necessarily be altered.

If, instead, the increase of money comes initially into the hands of savers who use it thereby to increase the supply of loanable funds, the current rate of interest will be driven down, *ceteris paribus*, and the composition of total output will be altered in favor of investment.²⁹ The germ of an Austrian theory of business cycles subsequently developed by Hayek in his 1930 lectures is contained in this last notion.

In view of the debates in our own century over "the classical dichotomy" of monetary and value theories, and the related question of the neutrality of money, it is noteworthy that Cantillon refused to separate monetary theory from value theory. He upheld a loanable funds theory of interest, asserting that "the interest of money in a State is settled by the proportionate number of lenders and borrowers, . . . just as the prices of things are fixed in the alteractions of the market . . . by the proportionate number of sellers and buyers."³⁰ With an eye to relative prices, Cantillon surveyed the effects of new money on interest rates and concluded once again that the demand-specific aspects are critical.

If the abundance of money in a State comes into the hands of money-lenders it will doubtless bring down the current rate of interest by increasing the number of money-lenders: but if it comes into the hands of those who spend it will have quite the opposite effect and will raise the rate of interest by increasing the number of entrepreneurs who will find activity by this increased spending and who will need to borrow in order to extend their enterprise to every class of customers.³¹

In effect, Cantillon saw very clearly what many writers of the next century apparently failed to see, namely, that an influx of precious metals can act in two ways. The output of the mines may be *lent*—which will tend to lower the rate of interest—or it may be *spent*—which will directly stimulate production, increase the demand for loans in anticipation of making a profit, and raise the rate that people will be willing to pay for such loans.

In addition to anticipating Austrian economics on the important relationship of money to changes in relative price, Cantillon's analysis supplements Austrian theory, even at this late date. The concept of relative price includes prices of the same good at different moments of time and at different points in space. Although Austrian economists have pioneered the analysis of time in economic relationships, they have by and large ignored the effects of space. Cantillon demonstrated only a minor awareness of the significance of time,³² but he was ahead of many later writers in seeking to integrate the effects of area and distance into his economic analysis. Although this is not the place for a detailed analysis of Cantillon's legacy to spatial economics, the following contributions should be noted: (1) Cantillon injected locational factors into Locke's explanation of the effect of increased money on product

prices; (2) he provided a theoretical explanation of equilibrium price difference over space; (3) he set forth an economic explanation for the location of various exchange and production activities, anticipating a number of subsequent developments in spatial economics in the process.³³

Conclusion

Austrians have good reason to claim affinity with eighteenth-century classical economics, but it has not always been clear to other economists wherein that affinity lies. This paper demonstrates that several key elements of the Austrian tradition were anticipated by Richard Cantillon in the eighteenth century. It was Cantillon's misfortune, however, not only to meet a violent and untimely death, but to be neglected in the history of economics for over a hundred years. William Stanley Jevons took the measure of Cantillon's lineage and his fate in 1881.

The first systematic treatise on economics was probably written by a banker of Spanish name, born from an Irish family of the County Kerry, bred we know not where, carrying on business in Paris, but clearly murdered in Albemarle Street [London].³⁴

Dare we now add an element of Austrianism to an already mixed nationality?

Probably the most distinctive trait of the Austrian tradition in economics is its radical subjectivism. Menger reversed a century-old (British) tradition of explaining value in terms of production costs. He did this by making value depend instead on the subjective utility considerations of individuals who seek to satisfy their own wants. From this perspective Cantillon's analysis is quite different. His value theory centered on the classical notion of objective, or intrinsic, value. However, Cantillon's view on the operation of the market system, on competition and entrepreneurship, and on the influence of money on market prices are congenial to the Austrian tradition, past and present. These views do not make Cantillon a pedigreed member of the Austrian sect, but they establish him as an important fellow-traveler of an earlier age.

NOTES

1. For a recent, noteworthy attempt to break this habit of thought, see William Jaffé, "Menger, Jevons and Walras De-Homogenized," *Economic Inquiry*, 14 (December, 1976), pp. 511-24.
2. One of the ways in which Cantillon's *Essai* circulated in the 18th and 19th centuries was as part of the *Discours politiques*, edited by Eléazar Mauvillon between 1754 and 1757. The *Discours* was a five volume work that reproduced important writings of the time, beginning with David Hume's famous work of the same title. Volume 3 contains a reprint of Cantillon's *Essai*. Interestingly, Menger's library contained volumes 1, 4 and 5, but not volume 3. Thus, Cantillon seems to have had no direct influence on Menger. On this point, see Takumi Tsuda, "Etude Bibliographique sur L'Essai de Cantillon," in *Richard Cantillon: Essay de la Nature du Commerce en General* (Tokyo: Kinokuniya Book-Store Co., 1979), pp. 416 ff.
3. Richard Cantillon, *Essai sur la nature du commerce en général*, ed. and trans. by Henry Higgs (London: Macmillan & Co., 1931), p. 46. Throughout this paper I have used my own translations of the original French text reprinted in this edition.

4. J. J. Spengler, "Richard Cantillon: First of the Moderns," in Spengler and Allen, *Essays in Economic Thought: Aristotle to Marshall* (Chicago: Rand McNally & Co., 1960), p. 109.
5. Cantillon, *Essai*, p. 56.
6. *Ibid.*, p. 52.
7. *Ibid.*, p. 6.
8. *Ibid.*, p. 28.
9. *Ibid.*, p. 30.
10. F. A. Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), p. 45.
11. *Ibid.*, p. 51.
12. Cantillon, *Essai*, pp. 28–30.
13. *Ibid.*, pp. 60–62. Emphasis supplied.
14. Hayek, *Individualism and Economic Order*, pp. 92–106; I. M. Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).
15. Hayek does not deny that neo-Walrasian theory has contributed significantly to the development of static economic analysis; but he maintains that it has not contributed, and cannot contribute, to the development of economic dynamics. See *Individualism and Economic Order*, p. 95.
16. Indeed, this may be the only way to come to grips with Cantillon's theory of competition. There are no references to "concurrence" in his *Essai*, and on this basis at least one writer claims that Cantillon advanced the doctrine of competition only in a minor way. See K. G. Dennis, "Competition" in *the History of Economic Thought* (New York: Arno Press, 1977), p. 60. On the other hand, Cantillon's references to the entrepreneur abound. The *Essai* numbers a scant 165 pages, yet there are 110 separate references to the entrepreneur.
17. In *Competition and Entrepreneurship* (p. 14), Kirzner maintained: "It can be shown that our confidence in the market's ability to learn and to harness the continuous flow of market information to generate the market process [of competition] depends crucially on our belief in the benign presence of the entrepreneurial element."
18. Cantillon, *Essai*, p. 48.
19. *Ibid.*, p. 56. Also, *supra*, note 16.
20. Ludwig von Mises, *Human Action*, 3rd rev. ed. (Chicago: Henry Regnery, 1963), p. 253.
21. *Ibid.*
22. Kirzner, *op. cit.*, p. 39.
23. See Lawrence H. White, "Entrepreneurship, Imagination and the Question of Equilibration," an unpublished paper written at Harvard University for Prof. Robert Nozick's Philosophy 177 Course (January 14, 1976).
24. Cantillon, *Essai*, p. 54.
25. *Ibid.*, pp. 150–52.
26. "The Ability to Deal with Disequilibria," *Journal of Economic Literature*, 13 (September, 1975), pp. 827–46.
27. Cantillon, *Essai*, p. 160.
28. *Ibid.*, pp. 162–66; 172–74. Thus it is that "[i]n England the price of meat might be tripled while the price of corn rises no more than a fourth" (*Essai*, p. 178).
29. Cantillon, *Essai*, p. 214.
30. *Ibid.*, p. 198.
31. *Ibid.*, p. 214.
32. He noted, for example, that "customers prefer paying a little more to get what they want ready at hand in small quantities rather than lay in a stock . . . by buying at first hand" (*Essai*, p. 53).
33. For elaboration of these arguments, see R. F. Hébert, "Richard Cantillon's Early Contributions to Spatial Economics," *Economica* 48 (February, 1981), pp. 71–77.

34. W. S. Jevons, "Richard Cantillon and the Nationality of Political Economy," *Contemporary Review* (1881): reprinted in the Higgs edition of Cantillon's *Essai*, p. 360. Jevons might have added that Cantillon also maintained business accounts in Holland and other European countries.

Professor Hébert on Entrepreneurship

by Murray N. Rothbard

*Dept. of Social Sciences
Polytechnic Institute of New York*

Since I admittedly know more about Austrian economic theory than about Richard Cantillon, I would like to focus my comments on the Austrian aspects of Prof. Hébert's paper, in particular his discussion of entrepreneurship. Hébert is correct in his discussion of the differences between Mises' and Kirzner's concept of the entrepreneur and in his critique of the Kirzner approach.

Mises conceives of the entrepreneur as the uncertainty-bearer, who receives profits to the degree that he can successfully forecast the future, and suffers losses to the extent that his forecasting goes awry. One evident case of rewards in proportion to the success of forecasting is the stock or commodity markets. The stock or commodity speculator, furthermore, clearly suffers losses to the extent that his forecasting is significantly less accurate than that of his fellow speculators. But Mises points out that the market as a whole is in the same situation as the stock or commodity market. The entrepreneur who buys raw material and hires labor, and who thereby incurs costs in order to produce a future product, is expecting that he will be able to sell the product to customers for a revenue greater than the costs. Just as the stock speculator purchases stock in the hope and the expectation that it will rise in price, so the employer incurs costs in the expectation that he will be able to sell the product at a greater price.

To Kirzner, on the other hand, entrepreneurship becomes reduced to the quality of *alertness*; and uncertainty seems to have little to do with the matter. In his lectures, Kirzner likes to stress the analogy that the entrepreneur is a person who, upon seeing a \$10 bill in front of his nose, is alert to the existence of the money and leaps to grab it. The alert man will grab the \$10 note rapidly; the less alert will take longer to see his opportunity and to take advantage of it. One problem, as Hébert mentions, is that it is difficult to account for actual *losses*; for the worst that can happen to the non-alert sluggard is that he misses his opportunity for gaining \$10. But how then does it ever come about that he actually *loses* 10 or more dollars? Moreover, by stressing alertness, Kirzner is emphasizing a quality of perception, of perceiving an opportunity that virtually exists, as a real *thing* out there. In reality, however, any profit opportunity is uncertain, and rather than be

a real existing entity, it must always be subject to uncertainty. It is never as simple as mere alertness.

Take the case of perhaps the best fictional portrayal of the entrepreneurial function, Somerset Maugham's short story, *The Verger*. In this story, the illiterate verger of a church in London is fired for not being able to read or write. Walking down the street looking for a cigarette for consolation, he observes that he cannot find a tobacconist in the neighborhood, and so he decides to invest his severance pay in setting up a tobacconist shop. This comes close to the Kirzner model of "perceived opportunity," of being alert to a gap in the services provided by the market. But even here, matters were not that simple. The verger, after all, had to forecast costs and revenues, and he could well have suffered losses if his forecasting had erred greatly. The need for a tobacconist could have withered from a change of smoking habits, from a new store entering the neighborhood at the same time, or whatever.

Even Kirzner's best case, the arbitrageur, is subject to uncertainty, a point which Hebert overlooks. The arbitrageur can perceive that a product sells for one price at one place and at a higher price somewhere else, and therefore buy in the first place to sell in the second. But he'd better be cautious. The transactions are not instantaneous, and something might occur in the interim to change the seemingly certain profits into losses. It is, after all, possible that the other entrepreneurs, far from purblind to the profit opportunity lying await for arbitrage, knew something which our would-be arbitrageur does not. At any rate, he might be better advised to look before he leaps. Surely, *some* arbitrageurs in the history of the world have suffered losses.

As Hebert points out, Mises applies the concept of entrepreneur to all cases of uncertainty-bearing, and since laborers face uncertainty in deciding where to move or what occupation to go into, laborers are also entrepreneurs. But the most important case of entrepreneurship, the driving force in shaping the actual structure and patterns of production in the market economy, are the capitalist-entrepreneurs, the ones who commit and risk their capital in deciding when, what, and how much to produce. The capitalists, too, are far more subject to actual monetary losses than are the laborers.

Kirzner's entrepreneur is a curious formulation. He need not, apparently, risk anything. He is a free-floating wraith, disembodied from real objects. He does not, and need not, possess any assets. All he need have to earn profits is a faculty of alertness to profit opportunities. Since he need not risk any capital assets to meet the chancy fate of uncertainty, he *cannot* suffer any losses. But if the Kirznerian entrepreneur owns no assets, then how in the world does he earn profits? Profits, after all, are simply the other side of the coin of an increase in the value of one's capital; losses are the reflection of a loss in capital assets. The speculator who expects a stock to rise uses money to purchase that stock; a rise or fall in the price of stock will raise or lower the value of the stock assets. If the price rises, the profits

are one and the same thing as the increase in capital assets. The process is more complex but similar in the purchase or hiring of factors of production, the creating of a product and then its sale on the market. In what sense can an entrepreneur *ever* make profits if he owns no capital to make profits on?

For example, I might have a brilliant idea on how to make a profit on the market. I might be keenly alert to a profit opportunity virtually lying at my feet. I may have a sure tip on the stock market. But if I haven't got any money to invest, the profits, perceived opportunity or not, will simply not be made. Entrepreneurial ideas without money are mere parlor games until the money is obtained and committed to the projects.

One Kirznerian reply to such criticisms is that the entrepreneur need not own any assets, need not be a capitalist, if he can induce other people with money to invest in his idea.

But this reply is unsatisfactory. Let us consider two possible such cases. In one example, I, with a brilliant entrepreneurial idea, sell that idea to someone with money; we invest in that project, with him putting up all the money and letting me be a junior partner because I contributed the idea. He keeps, say, 80 percent of the shares, and gives me the other 20 percent. But the Kirznerian concept is now contradicted. In the first place, the moneyed man, risking his own assets in the firm, has thereby *become* an entrepreneur. The employer who spends his capital and hopes for a profitable return *is* an entrepreneur, an uncertainty-bearer, and he is also to the same extent a capitalist, since that is the extent of assets that he is risking. But there is more to the problem than this. For I might have begun as a free-floating wraith, as a man with an idea and no assets. But because of my contract with the moneyed investor, I have now *become* a capitalist, since I now own assets to the amount of 20 percent of the firm. In other words, there are here two fundamental and fatal flaws in Kirzner's notion of the alert idea man as the entrepreneur: one, that the capitalist is *also* an entrepreneur, and two, that the pure idea man has, willy nilly, become a capitalist.

The second possible case of the entrepreneur financing his project at first blush looks more favorable for Kirzner's doctrine. The pure idea man induces a capitalist to *lend* him all the money he needs to invest in his idea. The entrepreneur takes the loaned funds and set up his business, investing in the new idea, and hoping for profits. But, once again, the Kirzner concept is contradicted. For the idea man has still become a capitalist-owner; for he now owns all the assets of the new company, even though they may be mortgaged to the hilt in loans from his backer.

The former idea man has once again, willy nilly, become an asset-owner, a capitalist. He owns the equipment and the raw material, he owns the product before sale, and he owns the money acquired from sale. He will suffer losses if the revenues do not meet expectations. It is true that he will have to share any profits with the lender by paying him interest. But the lender, though his interest return is fixed,

is still partly an entrepreneur. For while his return is fixed, it is by no means certain, and if the idea fails and the firm goes bankrupt, the capitalist's money has been lost. So that he, too, still shares the entrepreneurial function with the idea man.

It might be said that, in this case at least, the idea man can lose no money because all the money was loaned to him by the capitalist. But, as in the first case where he received assets as a gift from his partner, the entrepreneur, by borrowing money, soon *became* a capitalist and asset owner. The man who borrows \$1 million and then buys \$1 million worth of assets is now someone risking that million, and he loses his share of the assets if he suffers insolvency. Furthermore, his interest payment is now a net loss to him. Aside from the interest due, it is true that he will not be monetarily worse off than he was at the very beginning, when he had the idea. But he will be monetarily poorer than he was while he owned the new plant. An employer-entrepreneur must be a capitalist; *at what time* he became a capitalist and asset owner is irrelevant to the theory.

If I may engage in a bit of sociology of knowledge, I think I can explain why Kirzner has deviated so sharply from the main Misesian line. In the first place, there is a certain uncharacteristic lack of clarity in Mises' discussion of entrepreneurship. While Mises basically links the capitalist and entrepreneur together in uncertainty-bearing, there are passages in his *Human Action* which treat the entrepreneur as an entirely separate entity, and not just as the forecasting aspect of the activities of the capitalist or laborer. In other words, there is a certain amount of textual justification in Mises for the Kirzner turn—justification which did not exist in Böhm-Bawerk, where the entrepreneur is clearly the capitalist and there is no possibility of such separation. On the other hand, Böhm-Bawerk did not develop the theory of profits, losses, and uncertainty to any extent, which had to wait for Mises, who grounded himself on Frank Knight as well as the other Austrians.

But, second and I think more important, Kirzner developed his theory of entrepreneurial alertness I believe in reaction to the opposite deviation from main-line Misesianism introduced into the Austrian arena by Ludwig M. Lachmann. Becoming a disciple of G. L. S. Shackle, Lachmann, and following him other younger Austrians, maintains not only that uncertainty is pervasive on the market, but also that we cannot even say that the market contains a tendency toward equilibrium, a tendency fueled by the profit-and-loss signals of the market. To Lachmann, expectations and therefore actions on the market are random, rather than responsive to market signals. It is one thing to say, with Mises and his followers, and in contrast to the neo-classical economists, that equilibrium does not and can never exist on the market. It is quite another thing to say that the market does not even harbor equilibrating tendencies.

The upshot is really the scrapping of economic theory altogether, and the Lachmannian economist becomes a mere institutionalist and historian, recording past choices and trends. There is no question that Mises would have called such a doctrine *anti*-economics. I believe that it was in horrified reaction to this Lachman-

nian nihilism that Professor Kirzner sought a way to downplay uncertainty and to make his entrepreneur a more tangible and objective entity earning tangible profits on the market. In the dialectic of the history of thought, it is a common occurrence for one deviation from the main line of theory to give rise to a deviation in the opposite direction. Since I believe the Mises-Hayek mainline position to be the correct one on this issue, I can only hope that these deviations will in effect cancel each other out and that Austrian thought will return to its own mainstream position.

Next, Professor Hebert mentions Schumpeter's theory of entrepreneurship, and contrasts it to the Misesian position. But while it is true that Schumpeter was trained in Böhm-Bawerk's seminar in Vienna at the same time as Mises, he early shifted to a Walrasian position. Being a Walrasian, Schumpeter had to believe that general equilibrium is a living reality, an existing state of affairs, at least part of the time. But if the world is in general equilibrium, how do business cycles or growth and development emerge?

Schumpeter's *Theory of Economic Development* was a fascinating, though ill-conceived, attempt to derive a theory of the business cycle and economic growth from a Walrasian general equilibrium starting-point. According to Walras, tastes, technology, and resources were given in general equilibrium. If we begin with the economy in that equilibrium state, therefore, any change from that state must occur in at least one of these variables. To Schumpeter, as to other neo-classical economists, tastes could not be the changing element. Tastes he regarded as basically fixed; certainly they could not be the driving force of economic change. Total supply of resources didn't change very frequently either. So Schumpeter was left with innovation in technology as the only possible motor force for any change, be it business cycles or economic development. But then Schumpeter was confronted with a problem: how would these innovations be financed? Not out of new savings, since tastes were given, and since by definition net savings are zero in equilibrium. Not out of profits, since by definition profits are zero in equilibrium. One way out might have been finance out of interest returns, since, according to Austrian theory, savings, the result of positive time preference, are positive even in equilibrium. But Schumpeter had rejected the concept of time preference, so he was left with interest and profits both being zero in equilibrium. The result was that Schumpeter had trapped himself in a Walrasian box: the only conceivable way by which new investment, which had to be in innovations, could be financed was by the creation of new money. This meant that only inflationary bank credit could finance economic development.

In short, because Schumpeter believed in the real existence of Walrasian general equilibrium, and since he boxed himself into the position that only inflationary bank credit could finance innovations, some important consequences necessarily followed. Since general equilibrium is by definition in a world of perfect knowledge and certainty, and since that world of endlessly unchanging rounds of activity has no room for entrepreneurship, it followed automatically that the only entrepreneurial

function could be disruption of equilibrium. Entrepreneurs could not make any adjustments, since in the fixed and certain world of general equilibrium, there is nothing to adjust.

Secondly, it followed that entrepreneurial profits could only redound to the innovators, and that interest is the return on inflationary bank loans. Economic development, and the inflationary boom, a boom sparked by bank credit to innovations, had begun. But if the economy begins in Walrasian equilibrium, it had to return there, otherwise equilibrium is only relevant to one originating point of the economic process. Equilibrium cannot be a real entity unless a strong tendency exists to return to that state, once dislodged. So to maintain his Walrasianism in dealing with economic change, Schumpeter had to come up with the business cycle; the depression would have to be the mechanism by which the economy returned to the general equilibrium state. Schumpeter found the mechanism of that return in the alleged moment in which the new products or new equipment are finally produced and poured onto the market; the advent of the new products, Schumpeter theorized, outcompeted the older firms and drove them into bankruptcy. The losses imposed on the older firms constituted the depression phase of the cycle.

It was an ingenious schema, but with many grave flaws. Apart from the fact that there is no evidence that booms are confined to innovations or recessions to older processes (which forced Schumpeter to confuse matters still more with a multi-cycle schema two decades later), one wonders why in a Walrasian world of perfect certainty—or, indeed, in the real world of reasonably astute entrepreneurs—the older firms had to wait for the shock of the influx of new products. Why couldn't they foresee the moment much earlier and take precautionary measures?

But the major problem is fundamental and methodological. Schumpeter's business cycle theory and his theory of growth are, for all their suggestiveness, not positive theories of the real world at all; they are simply ways by which slavish adherence to Walrasian categories boxed Schumpeter in and forced him into his conclusions. In a sense, this was theory by default.*

The Schumpeter case highlights the true nature of Austrian economics and Austrian methodology. Austrian economics has generally been dismissed as extreme *a priori*ism, cut off from the empirical data of the real world. The true situation is exactly the opposite. Austrian theory ruthlessly confines itself to an analysis of real life in the real world. It avoids abstract and unreal "models" and theoretical boxes. It shuns false assumptions and premises. It rests its deductive theoretical structures squarely on empirically grounded general axioms. Methodologically, it is far closer to classical economics than is the current Walrasian orthodoxy.

*For a development of this theme, see my "Breaking Out of the Walrasian Box: The cases of Schumpeter and Hansen," *Journal of Austrian Economics* (forthcoming).

West's "Cantillon and Adam Smith": A Comment*

by Roger W. Garrison

*Department of Economics
Auburn University*

Introduction

Students and admirers of Adam Smith will welcome Edwin West's reappraisal of the relationship between Smith and Cantillon. They have come to expect that each new effort by West will be a treat, and they have come to accept that each will be ever so slightly biased in favor of Smith. West's readers will not be disappointed with the present treat, and they will find that West has been eminently fair to both Adam Smith and Richard Cantillon.

The goals of the reappraisal are quite modest. West seeks to establish to the extent possible that Cantillon was, in some sense, a forerunner and inspirer of Smith. And in the process of achieving this goal, he seeks to learn more about both writers. We soon realize, though, that the evidence he presents and his discussion of it easily outdistance his stated goals. West looks beyond the conventional comparison of these two writers. Smith and Cantillon are obviously poles apart on the issue of Mercantilism versus the system of natural liberty. West focuses his attention instead on the interstices of argument. It is here that he finds a certain affinity between the two. Both Cantillon and Smith approach the microeconomic topics, such as the question of wage differentials, in the same way.

I will argue that the separation of what West calls the "big positions" and the microeconomic analysis, together with his discussion of the latter, allows us to relate Smith to Cantillon in a more comprehensive way. With the aid of a few additional considerations from the standard literature, West's reappraisal helps us to construct a "grand view" that shows how the contrasting visions of these two thinkers are related to one another in terms of both analysis and policy. The payoffs of the "grand view" are threefold. (1) It allows us to see that some of Smith's

*Edwin G. West's paper, "Richard Cantillon and Adam Smith: A Reappraisal," was published as a Carleton University Economics Working Paper, #80-12, August 1980; Prof. Garrison's paper, however, stands on its own as a contribution to the history of economic thought.—Ed.

positions that West regards as surprising, particularly his position on usury, are not surprising at all. (2) It brings to the surface a common denominator among the microeconomic issues in which Smith improved on Cantillon and another common denominator among the microeconomic issues in which he fell short of Cantillon. (3) It shows clearly how these two sets of issues are related to the respective “big positions” of the two writers.

The “grand view” will first be presented in a skeletal and gestalt form. It will then be squared with standard interpretations of Cantillon and Smith. Finally, it will be tested by the evidence provided in West’s reappraisal. The goals of this comment are admittedly less modest than those of West’s paper. I can only ask that the performance be evaluated with this in mind.

The Economics of the Here and Later

West limited his discussion to the microeconomic issues, but his insights into these issues point the way to a fruitful comparison on the level of macroeconomics. The comparison I have in mind, however, requires that we take a rather unflattering view of both Cantillon and Smith. This may explain why the following formulation has remained so long below the surface. The unflattering view of Cantillon is the common view: Cantillon the Mercantilist. Although he evidenced deep understanding of a market economy and opposed state intervention of most sorts, he advocated interventions that would result in a more favorable balance of trade.

Left to its own devices the market would, in general, allocate resources in a satisfactory manner. But the market would not allocate as many of the world’s resources to the homeland as Cantillon preferred the homeland to have. That is, on the level of macroeconomics Cantillon was not satisfied with the interspatial allocation, or more specifically the international allocation, of resources. He therefore advocated those interventionist policies that were aimed at increasing the wealth of one nation at the expense of others. (The fact that the policies advocated would not actually achieve the objectives sought will be dealt with later.)

The unflattering view of Smith is not so commonplace, but it is one that, once stated and explained, should command broad acceptance. There is in Smith’s writings an important macroeconomic analogue to the Mercantilists’ position. Stated simply, *Smith is to time as Cantillon is to space*. In general, the market’s allocation of resources was perfectly satisfactory to Smith. But its intertemporal resource allocation under the system of natural liberty left much to be desired. The market will not allocate as many of the world’s resources to capital formation, and hence to *future* consumption, as Smith would prefer to see. He was therefore inclined to advocate those interventionist policies that were aimed at increasing the capital stock at the expense of consumption, or what amounts to the same thing, increasing future consumption at the expense of present consumption.

Although Smith sees his intertemporal bias as “entirely different” from the interspatial bias of the Mercantilists, his economics of time is clearly equivalent to their

economics of space. This is nowhere more clear than in Smith's own comparison. After explaining the unreasonableness of international restraints aimed at making the balance of trade more favorable, Smith argues that

There is another balance . . . very different from the balance of trade, and which, according as it happens to be either favorable or unfavorable, necessarily occasions the prosperity or decay of every nation. This is the balance of annual produce and consumption. If the exchangeable value of annual produce . . . exceeds that of the annual consumption, the capital of the society must annually increase in proportion to this excess.¹

But Smith maintains that "This balance of produce and consumption is entirely different from, what is called, the balance of trade."² The difference, though, is nothing but a reflection of the metaphysical difference between time and space. From the standpoint of economic efficiency the two balances can be treated the same. Under the system of natural liberty there will be a natural balance in the allocation of resources between one country and another as well as between one period of time and another. From the standpoint of policy they *were* treated the same. Smith advocated a favorable balance of produce and consumption in the same sense that Cantillon and the other Mercantilists advocated a favorable balance of trade.

This relationship between Cantillon and Smith shows up in West's paper in a slightly disguised form. West compares the "zero sum game" on the Mercantilists with the "dynamic system" of Smith. Although the connotations of these terms make Smith's vision look more appealing, the terms themselves are based on the relationship just outlined. Cantillon was concerned with the allocation of resources among nations at a given period of time; Smith was concerned with the allocation of resources among periods of time for a given nation.

West is content to impute the dynamics of Smith's vision to the constant improvement in technology brought about by the division of labor.³ If this were the end of the story, there would be nothing objectionable about Smith's vision. The division of labor is an inevitable result of the system of natural liberty. But there is more to the story. Smith wanted the system to be a little more dynamic than natural liberty, by itself, would allow for. He evaluated the market against a standard that was more future oriented than the market itself, and he prescribed policy accordingly. While Cantillon preferred *here* to *there*, Smith sacrificed *now* for *later*.

Productive and Unproductive Labor—Once Again

Although West did not deal directly with the issue of productive versus unproductive labor in his reappraisal, Smith's distinction between the two categories of labor figures importantly into the "grand view" that I am proposing. The distinction is important as a manifestation (probably the most pronounced manifestation) of Smith's bias against the present and in favor of the future. Before highlighting further the intertemporal aspects of this issue, it may be helpful to discuss briefly the alternative perspectives.

Much has been written about this curious distinction that dominates the third chapter of Book II of *The Wealth of Nations*. Undoubtedly, the controversy is at least partly attributable to Smith's own choice of words. The word "useful" is used early in the book as a synonym for "productive"; later on the same word is used to characterize both productive and unproductive labor.⁴ Most modern texts on the history of economic thought begin their treatment of Smith's distinction with the claim that Smith has been maligned or misinterpreted on this issue. Presumably the misinterpretation consists of taking "unproductive" to mean "useless," and viewing unproductive laborers as wards of society. Under this misinterpretation, unproductive laborers would be dependent on productive laborers in the same way that welfare recipients are dependent on income earners and—worse yet—in the same way that non-agricultural classes are dependent, in the Physiocrat's view, on agriculture.⁵ The now-dominant interpretation entails a purely stipulative distinction. Productive labor produces capital goods; unproductive labor produces services. Remaining dissatisfaction with this view hinges on the fact that it does not readily accommodate the categories of durable consumer goods or human capital. A more interesting source of dissatisfaction is the incongruous use of antonyms to contrast services with capital goods. In what sense are they opposites?

Smith's distinction between productive and unproductive labor is to be linked not to his journey to France but to his upbringing in Scotland. The basis for the distinction is not Physiocratic fallacies but Presbyterian values. Productive labor is future oriented; unproductive labor is present oriented. The former is good and the latter is bad. This is the sense in which the two categories are opposites. This value bias is clearly acknowledged by West in his book on Smith. He points out that "Smith, like a prudent steward of a Scottish aristocrat's estate, could hardly disguise a strong personal preference for much private frugality, and therefore for 'productive labor,' in the interest of the nation's future accumulation."⁶ West quotes from *The Theory of Moral Sentiments* to show that Smith's standard of intertemporal values is exhibited by his impartial spectator. In modern parlance we would say that the impartial spectator has a zero rate of time preference.

The spectator does not feel the solicitations of our present appetites. To him the pleasure which we are to enjoy a week hence, or a year hence, is just as interesting as that which we are to enjoy this moment.⁷

The quotation can be extended to show the impartial spectator's view of mere mortals who have a positive rate of time preference.

When for the sake of the present, therefore, we sacrifice the future, our conduct appears to him absurd and extravagant in the highest degree, and he cannot enter into the principles which influence it.

It is also quite clear that in the absence of the influence of the impartial spectator, individuals would fall far short of Smith's standard.

The pleasure which we are to enjoy ten years hence interests us so little in comparison with that which we may enjoy to-day; the passion which the first excites is naturally so weak in comparison with that violent emotion which the second is apt to give occasion to, that the one could never be any balance to the other'⁹

It is not difficult to see how Smith's standard of zero time preference, coupled with his awareness of sharply positive time preferences, could lead him to make the very policy recommendations that West found to be surprising. Smith sought to correct this natural imbalance by policies aimed at creating a favorable balance of produce and consumption. He sought to reallocate resources away from the present and toward the future, that is, away from the employment of unproductive labor and toward the employment of productive labor. And, as we will see, this is precisely what his particular anti-usury scheme was to achieve.

Micro-affinity and Macro-repellency

Our "grand view" allows us to see how Cantillon and Smith can reinforce one another on the level of microeconomic analysis and at the same time write at cross purposes on the level of macroeconomic policy. Their writings were microeconomically similar because each had a good understanding of the market process; they were macroeconomically different because they were attempting to reallocate resources in different ways. A more detailed look at Smith's proposed credit controls will strengthen the idea that Smith's intertemporal economics and Cantillon's international economics are analytically equivalent. A brief consideration of Smith's views on sharecropping and other issues will demonstrate the utility and generality of our "grand view."

West found Smith's support for an interest-rate ceiling to be surprising on two counts. (1) A ceiling on interest "would aggravate 'the evil of usury' by increasing the costs of borrowing" This is a consequence that Smith clearly recognized in the case of a complete prohibition of interest charges, that is, in the case where the ceiling is set at zero percent. (2) Usury laws conflict "with the major assumption in *The Wealth of Nations* that each individual has the best knowledge of his own interest."¹⁰ Not much needs to be said in response to this second point. It should be clear enough by now that a strong intertemporal bias is rooted deep in Smith's thinking.

The first point, which in West's view involves an inconsistency, is more interesting. The inconsistency vanishes when we realize that Smith was not interested in reducing the cost of borrowing with his credit controls. He was trying to reduce the amount of funds borrowed for certain categories of loans. And his anti-usury scheme was well suited for this. Smith notes that money is lent to the government at three percent, and to sound businessmen at four, and four and a half. Only "prodigals and projectors," people who are most likely to "waste and destroy" capital, would be willing to borrow at eight or ten percent. Smith therefore recommended

an interest ceiling at five percent.¹¹ This policy was not aimed at allowing the prodigals and projectors to obtain funds more cheaply, but at preventing them from obtaining any funds at all. These funds would be diverted, then, into the hands of those who are more future oriented. West spells out these consequences clearly but remains surprised at Smith. We now see that the values held by Smith and the policies recommended are wholly consistent.¹²

There is an additional similarity between a favorable balance of trade and a favorable balance of produce and consumption that has not yet been mentioned. Restraints on international trade are aimed at making the balance of trade more favorable, thereby increasing the wealth of the nation. In reality, of course, these restraints reduce the potential gains from trade, thereby reducing the wealth of the nation. Mercantilist policy is ultimately self-defeating. This, West points out, was recognized by Cantillon himself. Smith's own blueprint for increasing wealth was similarly self-defeating, although there is no evidence that this was ever recognized by Smith. Credit controls may be aimed at making the balance of produce and consumption more favorable, thereby increasing the wealth of the nation. In reality credit controls serve only to reduce the gains from intertemporal exchange. Individuals may prefer, say, one unit of a consumption good now to two or even five units of the good next year. If this preference is not allowed to be expressed in the market, then the wealth of the nation, reckoned in terms of present value, i.e. discounted at a rate corresponding to the individuals' true time preferences, will actually decrease. Wealth, correctly conceived, will be maximized in a system that restrains neither the international nor the intertemporal allocation of resources.

The issue of share-tenancy provides a modest test of our "grand view." West makes the judgment that Smith had less of an intuitive grasp of this issue than did Cantillon. Smith's shortcomings on this issue are imputed to a historical misperception and to a belief, supposedly held by Smith, that output had to be divided between landlord and sharecropper on a fifty-fifty basis.¹³ Neither of these explanations are very satisfying. They are at odds with our general perception of Smith's acumen. West did make an observation, however, that leads us towards a more satisfactory explanation of Smith's views on the issue. Smith faulted the system of share-tenancy because "It would not be in the interest of the cultivators to invest capital in the land from their own share of the produce . . ."¹⁴ Compared to sharecropping, fixed-rent farming gave rise to a greater rate of capital accumulation, and hence was more future oriented. We need look no further for an explanation of Smith's dissatisfaction of the share-tenancy system.

The generality of the proposed "grand view" can be put to the test by a consideration of West's concluding remarks. On the basis of his reappraisal, West itemizes the issues on which Smith improved upon the analysis offered by Cantillon, as well as the issues on which Smith fell short of or failed to profit from Cantillon. There is an interesting point to be made about these two categories of issues. While West reappraised the two writers on an issue by issue basis, the sum-

mary verdict fits neatly into our “grand view.” That is, for the issues on which Smith surpassed Cantillon, the interspatial considerations dominate; for the issues on which Smith fell short of Cantillon the intertemporal considerations dominate. Smith improved on the issues of wage differentials, the theory of location and the effects of embargoes on gold exports. He failed to improve on the issues of usury, share-tenancy, the theory of the entrepreneur, and the theory of profit.¹⁵

In summary terms we can say that Smith succeeded in ridding economic theory of the interspatial bias associated with Cantillon and other Mercantilists, and then proceeded to introduce a strong intertemporal bias. From the vantage point of the twentieth century it can be said that the interspatial battle has long since been won—due largely to the efforts of Adam Smith. The intertemporal battle, however, is still being fought.

Concluding Remarks

West’s paper covered considerably more ground than I have chosen to deal with in my comments. I have not been concerned, for instance, with the extent to which Cantillon’s *Essai* is the “cradle” of economics as Jevons claimed, or the extent to which Smith actually drew upon Cantillon’s work. I have attempted instead to show how the visions of Cantillon and Smith square with one another on both the microeconomic and the macroeconomic levels.

My comments have been sufficiently unflattering to Smith to require some statement of appeasement. Does this pervasive intertemporal bias in Smith’s writings reduce our appreciation for Smith’s contribution? No. It only suggests the sort of filters we must put on our glasses in order to achieve the fullest appreciation of his writings. We must filter out the intertemporal bias when we read Smith just as we filter out the interspatial bias when we read Cantillon. When we read Edwin West, of course, we need neither filters nor glasses.

NOTES

1. Adam Smith, *The Wealth of Nations*, Modern Library Edition (New York: Random House Inc., 1937), p. 464.
2. *Ibid.*
3. Edwin G. West, “Richard Cantillon and Adam Smith: A Reappraisal,” Carleton University Economics Working Paper #80-12, August 1980 (following page references are to June 1980 manuscript), p. 5.
4. Smith, *Wealth of Nations*. Cannan points out this ambiguity in a footnote on p. 315.
5. For a brief discussion of the controversy see Joseph A. Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1954), pp. 628–31.
6. Edwin G. West, *Adam Smith: The Man and His Works* (New Rochelle, New York: Arlington House, 1969), p. 173.
7. *Ibid.*
8. Adam Smith, *The Theory of Moral Sentiments* (Indianapolis: Liberty Classics, 1969), p. 311.
9. *Ibid.*, p. 312.
10. West, “A Reappraisal,” p. 21.

11. Smith, *Wealth of Nations*, p. 339–40.
12. It is worth noting that the chapter in which Smith recommends credit controls immediately follows the chapter in which he deals with the distinction between productive and unproductive labor.
13. West, “A Reappraisal,” p. 23–4.
14. *Ibid.*, p. 24.
15. *Ibid.*, p. 31.

Richard Cantillon and the French Economists: Distinctive French Contributions to J. B. Say*

by Leonard P. Liggio

*Institute for Humane Studies
George Mason University*

Introduction

Richard Cantillon's life and his *Essai* occurred at a time of transition in European political, economic and intellectual history. The late seventeenth century had experienced the crisis in European thought which paralleled the Scientific Revolution. Accompanying the scientific revolution was a revolution in economic thought. Criticisms of mercantilism began to lay the groundwork for the Economic Revolution of the eighteenth century. The origins of the anti-mercantilist thought in France may be studied in Lionel Rothkrug's *Opposition to Louis XIV, The Political and Social Origins of the French Enlightenment* (Princeton, N. J.: Princeton University Press, 1965).

Richard Cantillon's rise to financial and intellectual fame began during the French Regency following the death of Louis XIV in 1715. During the minority of Louis XV, the nephew and son-in-law of Louis XIV, the Duke of Orleans, became Regent. The Regent immediately disbanded part of the army, thus economizing expenditures, cut taxes and ended religious persecutions. At the death of Louis XIV France had emerged exhausted, devastated and on the brink of revolt from one of the worst periods of war in its history. In his attempt to create an Absolutist regime, Louis XIV during his effective reign of fifty-five years sought to replace representative institutions, legal political opposition, and a limited state income by creating a warfare or national security state. To finance a permanent war-making apparatus with which to turn institutions and people toward external affairs the economic system of the national security state, mercantilism, was developed to its fullest by Jean Baptiste Colbert. Colbertism, as the highest form of mercantilism, provided the planning and control which garnered the taxes needed for policy of war.

*This paper was presented at the Cantillon Symposium, Pacific Grove, California, August 1980, sponsored by the Liberty Fund, Inc., in cooperation with the Institute for Humane Studies.

Louis XIV's war culminated in an almost twenty-five year long world war which ended soon before his death. For a number of reasons, some not dissimilar to those of Louis XIV, his former ally, England, joined his enemies. To fight the protracted war, England pioneered in initiating the Public Finance Revolution. The Public Finance Revolution was necessary if the English ministry was to carry out a far from popular war abroad without engendering internal opposition. To maintain a standing army it was necessary to defer taxation, which could have caused opposition to war in the country and in parliament. To accomplish these ends the twin pillars of central banking and a public debt were created. The Bank of England was created, and in exchange for its privileges, it acted as lender to the government, and assisted in the marketing of government bonds. The English government pursued the consequences of the Public Finance Revolution until the bursting of the South Sea Bubble (1719–20).

Having emerged from the world war in much worse financial condition than did England, France experienced the regent's economizing measures and his acceptance of John Law's inflationary scheme. The crash of John Law's Mississippi Bubble was the context within the Cantillon's fortune and economic insights were formed. The Regent was not only the support for Law's scheme. "But one ought to note that the Regent accorded his benevolence also to Cantillon—whose work was published in 1755 and inspired *l'Ami des Hommes* of Mirabeau (May, *de Cantillon à Mirabeau—Science Sociale*, 1938) and that his secretary Melon was the first, after Diderot, to "shake up economic matters," (*Oeuvres* IV, p. 81–82) in publishing the *Essai Politique sur le Commerce* in 1734."¹ (Jean Francois Melon (1680–1738) had been the secretary of Cardinal Dubois and the Regent, and as such probably would have been acquainted with Cantillon.)

An overview of the relationship of economic history and history of economics as discussed at the 1980 HES meeting at the Kress Library, would suggest an interaction between the crises introduced into the European economy by protracted wars and the development of economic thought. The English and French governments learned from the South Sea Bubble and Mississippi Bubble, following the previous quarter century of warfare, that the only remedy was to lower taxation by reductions of military spending. Such a remedy would permit the capital accumulation necessary to increased industrialization. However, from 1740 on, England and France undertook another quarter century of military conflict, creating another economic crisis and the growth of economic thinking in response.

Malachy Postlewayt began incorporating large portions of Cantillon's *Essai* in the works that he published in 1749, 1751–55, and 1757. The publication of Cantillon's *Essai*, Gournay's other publications of translation, and the outpouring of Physiocratic literature accompanied the more intensive phase of that period of warfare, the Seven Years' War.

The Peace of Paris of 1763 affirmed England's complete military victory, but at the price of an unprecedented massive national debt. The taxes required to ser-

vice the debt and administer the acquisitions in Canada and India led to radical opposition in England, Ireland and Scotland, the collapse of the East India Company and the Tea Tax, and the American Revolution. The 1776 publication of the *Wealth of Nations* was not an accident. Nor was the publication by Dr. Richard Price, the librarian of Smith's patron, the Earl of Shelburne, of his warning that for England to undertake a war against the Americans would result in a very large addition to the national debt. Finally, it should not be forgotten that Smith's friend, A. R. J. Turgot, as controller-general of Finances, was forced to resign because he advised the French king that military efforts against England during the American Revolution would lead to an unbearable national debt.

The French monarchy's bankruptcy and the French Revolution ushered in another quarter century of European warfare. The consequences led to the important economic analyses of J. B. Say (1803), James Mill (1808), David Ricardo (1811) and a host of followers immediately after the end of the war in 1815. The plateau of free market thought during the succeeding century paralleled a period of relative peace (partially interrupted by wars during 1859–1871). The consequence of the Great War–Great Depression in the 20th Century has been the growth of neo-mercantilism, and specifically a return to John Law's program and a rejection of Say's Law of Markets.

Cantillon and the Physiocrats

The financial crisis over Law's scheme caused Cantillon, and the Physiocrats after him, to recognize that the only property which retained its value at the end of the inflation was land. The mercantilists had sacrificed agriculture on behalf of subsidies to manufacturers and restrictions on food exports in order to reduce the wage costs for manufacturers. Emil Kauder and Henry W. Spiegel have called attention to the Italo-French school of utility theory of value culminating in the eighteenth century.² Lewis H. Haney and René Gonnard have noted the similarity of the approaches of these eighteenth century economists and the Austrian school.³ M. Beer and O. H. Taylor underscore that much of the thought of Aquinas and the Schoolmen can be found in the ideas of the Physiocrats.⁴ Stanley Jevons made reference to this superiority of the French over the English schools in the Preface to the *Theory of Political Economy*:

The true doctrine may be more or less clearly traced through the writings of a succession of great French economists, from Condillac, Baudeau, and Le Trosne, through J. B. Say, Destutt de Tracy, Storch, and others, down to Bastiat and Courcelle-Seneuil. The conclusion to which I am ever more clearly coming is that the only hope of attaining a true system of economics is to fling aside, once and for ever, the mazy and preposterous assumptions of the Ricardian school.⁵

It is possible that we are indebted to Louis-Gabriel-Léonce Guilhaud de Lavergne's *Les Economistes français du XVIIIe siècle* (1870) for the re-discovery of Cantillon's importance. Lavergne emphasized Cantillon's role as a precursor of the doctrines

which Quesnay introduced into the public's awareness of economic thinking. The Physiocrats were concerned to treat the economy as a natural phenomenon, a natural order, a process, in comparison to the mercantilists who emphasized the need for artificial and extraordinary government measures to achieve their objectives. In this the Physiocrats were following the lead given by Cantillon.⁶

Starting with their foundation in a theory of property, the Physiocrats constructed a science around the natural harmony of interests. Property owners should be those or their heirs who cleared and drained land for its cultivation. From Cantillon's analysis, including his contribution on entrepreneurship, the Physiocrats derived their sense of harmony of interests. Le Mercier de la Riviere, *L'Ordre naturel et essentiel des sociétés politique* (1767), described how competition is the means by which diverse economic interests are reconciled.⁷ According to Le Trosne, *De l'intérêt social* (1777):

It is competition which conciliates all interests: it is perfect only under the absolute reign of freedom of trade, which is the premier consequence of the right of property, and in consequence one of the most essential laws of the social order.⁸

The Physiocrats shared with Cantillon a system of thought based on methodological individualism. Cantillon's assumption that autonomy of the individual leads to harmony of interests was suggested by Mandeville's *Fable of the Bees*.

Victor Riquetti, marquis d' Mirabeau (1715–1789) (Mirabeau the elder) had had in his possession the manuscript translation into French of Cantillon's *Essai* for sixteen years.⁹ Mirabeau's *L'Ami de Hommes* (1756) was intended to be an extended commentary on Cantillon's *Essai* until it was retrieved by Cantillon's heirs, and publication of it was arranged. Knowledge of the manuscript ideas, and probably the publication of Cantillon's *Essai* was popularized by Jacques C. M. Vincent, seigneur de Gournay (1712–59). Gournay had arranged the translation and publication in French of Josiah Child and other works. He held the position of intendant of commerce and advocated a policy of laissez faire. Gournay's role in the history of economic thought needs to be more highly emphasized, as Joseph Schumpeter has noted. Schumpeter reports: "He appointed himself, as it were, tutor to his friends, whom he knew how to choose and, like a good tutor, he effaced himself in order to give stimulating pointers to other people's teaching. His two provable claims to our gratitude are his successful propaganda for Cantillon's work and his contribution to Turgot's education as an economist In the highest sense of the word Teacher, this man who never taught in the technical sense may have been one of the greatest teachers of economics that ever lived."¹⁰

The publication of the *Essai* in 1755 was followed by publications in France (1756), Amsterdam (1756) and Italy (1767). These editions had immediate as well as lasting impacts on economists in England (Postlethwayt, Smith, Young, Steuart, Rae, and Malthus), in Italy (Filangieri, Beccaria, Genovesi, Ferrara), and especially in France (Mirabeau, Quesnay, Du Pont de Nemours, Mably, Morellet, Gournay, Turgot, Condillac, Say, Germaine Garnier, Ganilh, Roederer, Accarias de Ser-

rienne, Daire).

The Physiocrats drew from Cantillon the ideas of the role of the consumer and of circulation effect, but failed to incorporate Cantillon's contribution on cumulative effects. Cantillon's emphasis on the central role of the consumer, although preceded by Mandeville's contribution, marked a radical departure from the mercantilist literature's central concern with the producer. The emphasis on the consumer in Cantillon and the Physiocrats is one of the elements of their thought that led to Say's Law of markets.¹¹

G. Pirou, "La Theorie de la valeur et des prix chez Petty et Cantillon," notes:

With Cantillon we find ourselves in the presence—for the first time in the history of economic doctrines—of a theory which is clear, coherent and well ordered. If one wishes to appreciate the originality, the novelty, which this theory presents over the earlier doctrines, over those of Petty in particular, it is necessary to see it from three points of view.¹²

Cantillon said: "The intrinsic value of a thing is the measure of the land and work which enters into production." Cantillon analyzed wealth by the standard of general wealth measured by land and by the standard of comparative wealth measured by money through prices. Cantillon advocated the role of the natural product resulting from money prices in the market in criticism of mercantilist planned development seeking artificially to increase national production.

Thus, Cantillon sought to confront the problem of normal or intrinsic price, and the causes which lead the current market or extrinsic price to coincide with the intrinsic price. He analyzed how under the action of market forces the market prices ceaselessly tends to approach the intrinsic price. For Cantillon, money is a commodity. Cantillon was completely in accord with private banking and opponent of the Public Financial Revolution based on state or privileged banking which creates inflation. Cantillon's and Law's positions on banking were crucial to the economic doctrines of each side.¹³

Louis de Lavergne's emphasis (1870) on Cantillon as precursor of Quesnay may have been derived from Marx's references to Cantillon's influence on Quesnay in volume one of *Capital*. Quesnay referred to Cantillon in his *Encyclopédie* essay on "Grains." Since Cantillon viewed supply and demand as the ultimate explanation of value, he considered land the source of wealth, labor as the power which produces wealth and all goods as constituting the sum of wealth.

As a supply and demand economist, Cantillon prepared the way for the Physiocrats by opposing restrictions on exports of foods and accepting resulting higher prices. But, he welcomed importation of cheaper food and raw materials to permit added population which would work in producing manufactured products for export as well as internal consumption.¹⁴

Schumpeter sees Cantillon as influential on succeeding economists through Quesnay. On harmony of interest he sees a line from Cantillon through Quesnay to Say and to Bastiat. On the primacy of the consumer's subjective wants Cantillon

through Quesnay influenced Condillac and Say, while on Capital theory the line went from Cantillon through Say to Smith. Along with other modern analysts, Schumpeter views Cantillon and the Physiocrats as intermediaries between the Scholastic utility value theorists and the post-1870 value theorists. Cantillon took the Scholastic analysis of risk bearing, entrepreneurship and utility theory and developed it so that French economists always had a focus on the central role of the entrepreneur. Cantillon was the link between Luis de Molina and Jean Baptiste Say.¹⁵

Schumpeter joins together Cantillon and Quesnay in the presentation of the most important aspects of Physiocratic thought:

Cantillon seems, however, to have been the first to construct such a schema [class structure] explicitly and to use it as a tool of analysis. This schema was adopted by Quesnay . . . labor plays an entirely 'passive' role with him exactly as it did with Cantillon.

The question how 'credit' should be distributed between Cantillon and Quesnay is both difficult and, from the standpoint of the sociology of scientific invention and scientific success, interesting. Cantillon, no doubt felt the Scientific need for some such tool, had the idea of how to construct one, and actually pointed the way toward doing so . . . as it is, Cantillon did for the *tableau* method what both Newcomen and Watt did for the steam engine.

Third and most important, the Cantillon-Quesnay *tableau* was the first method ever devised in order to convey an explicit conception of the nature of economic equilibrium. It seems impossible to exaggerate the importance of this achievement . . . Now Cantillon and Quesnay had this conception of the general interdependence of all sectors and all elements of the economic process in which—so Dupont actually put it—nothing stands alone and all things hang together.¹⁶

Cantillon and Turgot

The relationship of Cantillon's *Essai* to Turgot through Gournay is less important than the influence of Cantillon's ideas on Turgot. Turgot translated at Gournay's request Josiah Tucker's *Les Questions importantes sur le commerce* (1755) and published it in the same year as the *Essai* and under the publishing imprint of the same long out-of-business publisher in London. Schumpeter underlines the filiation of economic ideas in English thought as Child-Hume-Turgot-Smith, while on the continent, he associates Cantillon-Turgot-Say-Bohm-Bawerk in the development of value and Distribution. Turgot's *Reflexions sur la formation et la distribution des richesses* takes its foundation in Cantillon's essay and develops a theory of price, capital, money, interest, saving and investment which had a direct impact on Bohm-Bawerk and indirectly on von Wiser through Karl Knies. According to Schumpeter: "It is not too much to say that analytic economics took a century to get where it could have got in twenty years after the publication of Turgot's treatise had its content been properly understood and absorbed by an alert profession. As it was, even J. B. Say—the most important link between Turgot and Walras—did not know how to exploit it fully."¹⁷ Schumpeter places Turgot in the triumvirate of Turgot, Beccaria and Smith:

If we now try to compare Turgot's scientific personality with those of Becarria and A. Smith, significant similarities strike us first: all three were polyhistoric in learning and range of vision; all three stood outside the arena of business and political pursuits; all three displayed single-minded devotion to the duty in hand. Turgot was undoubtedly the most brilliant of the three . . .¹⁸

A glimpse of the spirit of Turgot, of which he shared derivation from Cantillon with the Physiocrats is indicated in his "In Praise of Gournay" (1759).

There is no need to prove that each individual is the only competent judge of his most advantageous use of his lands and his labors. He alone has the particular knowledge without which the most enlightened man could only argue blindly. He alone has an experience which is all the more reliable since it is limited to a single object.¹⁹

Cantillon introduced some of the elements of the problem of markets. Succeeding French economists—Turgot, Condillac, Say—analyzed the process of saving and net capital formation, the effects of savings on effective demand for all products and the impact of capital accumulation. Turgot, in the *Reflections*, noted that the income of society exhausted the value of the social product. Turgot's analysis of value of the product being exhausted by social revenues contributed to Say's Law of Markets. Turgot presented an early version of Say's Law in his *Observations On a Paper by Saint-Perary* (1767). From Cantillon and Turgot, Smith had noted the human disposition to quickly spend income from the sales of productive activities and contributed to Say's formulation of the Law of Markets. This is one of the areas in which Ricardo's acknowledgment of the influence of Turgot and Say as well as Smith and Stewart could be noted.²⁰

The Abbé de Condillac deserves further study if only to straighten out the conflict over his contribution between Schumpeter who considers utility theory so well developed by 1776 that Condillac is old hat, and Stanley Jevons who considered him "original and profound" and H. D. Macleod who considered Condillac "infinitely superior to A. Smith."²¹ Since Condillac drew his analysis from Turgot it is not difficult to understand Schumpeter thinking him unimportant next to the most brilliant economist of the eighteenth century. While Condillac may have presented a more "modern" economic theory than Smith, there are some who would prefer Smith, if only because he displayed those characteristics that the "philosophers" would label "gothic". On that issue, much turns on one's preference for a thinker who has wrestled much with his own thought or for one who has wrestled much with those of other great thinkers. Smith represents the best example of the latter.

Condillac's *Le Commerce et le gouvernement* (1776) drew on Cantillon directly, as well as indirectly from Turgot. One can appreciate the enthusiasm of Jevons on reading:

Value is not an attribute of matter, but represents our sense of its usefulness, and this utility is relative to our need. It grows or diminishes according as our need expands or contracts. But since the value of things is based upon need, it is natural that a more keenly felt need should endow things with a greater value, while a less urgent need endows them with less. Value increases with scarcity and diminishes with plenty.²²

Among the other late eighteenth century economists and philosophers whom Cantillon influenced included the brother of Condillac, the abbé Mably and the abbé Morellet, as well as Jean J. L. Graslin, whose *Essai analytique sur la richesse et sur l'impôt* (1767) was viewed as forerunner of the *Wealth of Nations*.²³

Smith's work was already well-known in France before 1776 due to his long visits to France and the impact of the *Theory of Moral Sentiments*. The *Wealth of Nations* received early attention in the *Journal des Savants* (February, 1777). Drawing from Cantillon, Smith noted men's disposition to spend quickly their income from the sales of their production and contributed to Say's formulation of the law of markets. Say improved Smith's analysis by returning to the contributions of Cantillon, Turgot and Condillac and providing the basis for the developments made by Mill and Ricardo.²⁴

Say's use of Cantillon's analyses of markets for labor led him to recognize that a producer willing to work at the rate of return will find a market for his services. From Cantillon, Say developed his theory of entrepreneurship by which entrepreneurs compete as brokers buying services of productive agencies. These insights contributed to his contribution on the Law of Markets. Say undertook to make Smith's ideas which he had encountered at the age of twenty-one (1788) during a trip to England more coherent. Say, basing himself on Cantillon, proved against the Physiocrats what Smith did not prove—man does not create matter, he transforms matter. In returning to Cantillon, Say was able to restore the foundations upon which Turgot had built of a utility value theory that Smith had neglected.²⁵

NOTES

1. I. Ph. May, *Le Mercier de la Rivière (1719–1801) aux origines de la science économique*, (Paris: Centre National de la Recherche Scientifique, 1975) p. 9 (n. 1).
2. Emil Kauder, *A history of marginal utility theory*, Princeton, New Jersey: Princeton University Press, 1965), chapters I–III. Henry W. Spiegel, *The Growth of Economic Thought*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1971), chapters 8–10.
3. Lewis H. Haney, *History of Economic Thought*, (New York, Macmillan, 1949), pp. 518, 587, 607. René Gonnard, *Histoire des Doctrines Economiques*, (Paris: Librairie Valois, 1930), pp. 152–158.
4. Max Beer, *An Inquiry into Physiocracy*, (London: G. Allen and Unwin, 1939). O H. Taylor, "Economics and the Idea of 'Jus Naturale'," *Quarterly Journal of Economics* XLIV, 1930, 2, 205–241, and "Economics and the Idea of Natural Laws," *Quarterly Journal of Economics*, XLIV, 1930, 1, 1–39.
5. W. Stanley Jevons, *Theory of Political Economy*, 3rd ed., (London, 1888) p. xlix.
6. Louis de Lavergne, *Les Economistes français du XVIIIe Siècle*, (Paris: Gullaumin, 1870). Felix Cadet, *Histoire de l'économie politique. les precurseurs* (Paris, 1869), (New York: B. Franklin, 1970).
7. Le Mercier de la Rivière, *L'ordre naturel et essentiel des sociétés politiques*, (Paris, 1767), chapters 39–40.
8. Guillaume Francois Le Trosne, *De l'intérêt social*, (Paris, 1777), pp. 603–605, 557–58.
9. Le Marquis de Mirabeau, *L'Ami des Hommes, au traite de la population*, la Haye, Chez Benjamin Gibert, MDCCLVIII, t. 1 chapter 2, pp. 27–49, chapter 7, pp. 153–236. Henri Ripert,

- Le Marquis de Mirabeau*, (Paris: Arthur Rousseau, 1901), pp. 64–65. Lucine Brocard, *Les Doctrines économique et sociale du Marquis de Mirabeau*, (Paris: V. Girard et E. Brière, 1902), pp. 46–53.
10. Schumpeter, *History*, p. 244. Gonnard, *Histoire*, p. 195.
 11. Mary Jane Bowman, "The consumer in the history of economic doctrine," *American Economic Review*, XLI, 2 (May, 1951), 1–18. Auguste Dubois, "Quesnay anti-mercantiliste et libre échangiste," *Revue d'économie politique*, XVIII, March, 1904, pp. 213–29. H. Truchy, "Le Libéralisme économique dans les oeuvres de Quesnay," *Revue d'économie politique*, XIII (1899), pp. 925–54. Albert Schatz, *L'Individualisme économique et social*, Paris, Librairie 1907, pp. 102–03.
 12. G. Pirou, "La théorie de la valeur et des prix chez Petty et Cantillon," *Revue d'histoire des doctrines économiques* (1911). G. Pirou, *Introduction à l'étude de l'économie politique* (Paris, 1939). B. Nogaro, *Le développement de la pensée économique* (Paris, 1944). M. Block, *Le progrès de la science économique depuis Adam Smith* (Paris, 1897).
 13. Robert Legrand, *Richard Cantillon*, Paris, V. Giard et E. Brière, 1900, passim. Henry W. Spiegel *The Growth of Economic Thought*, pp. 177–83. Gonnard, *Histoire*, pp. 175–78. Paul Lambert, "The Law of Markets Prior to J. B. Say and the Say-Malthus Debate" (trans. A. A. Maitland), reprinted in *International Economic Papers*, No. 6, (London: Macmillan, 1956), pp. 7–22.
 14. Ronald L. Meek, *The Economics of Physiocracy*, (London: George Allen and Unwin, 1962), pp. 266–69; William Letwin, *The Origins of Scientific Economics*, (Garden City, New York: Doubleday, 1964), pp. 237–38. Eric Roll, *A History of Economic Thought*, (New York: Prentice Hall, 1942), pp. 124–32. Gonnard, *Histoire*, pp. 177–79. Antoine Lacroix, *Actualité du Physiocratisme, François Quesnay*, Moulins, Cahiers Bourbonnais, 1969, p. 60.
 15. Schumpeter, *History*, pp. 217–23.
 16. Schumpeter, *History*, pp. 240–43, 223–39. May, *Le Mercier de la Rivière*, pp. 65, 68. Alfred Sauvy et al., *François Quesnay et la Physiocratie*, (Paris: Institut national d'Etudes Démographiques, 1958), 2 volumes, passim.
 17. Schumpeter, *History*, pp. 243–49, especially p. 249. Richard Cantillon, *Essai sur la nature du commerce général*, Alfred Sauvy, ed. (Paris: Institut National d'Etudes Démographiques, 1952), pp. XL 39. F. A. Hayek, "Sur l'Essai sur la nature du Commerce en général de Richard Cantillon, éditée avec une traduction anglaise," *Economic Journal*, XLII (1932). F. A. Hayek, "Richard Cantillon, sa vie, son oeuvre, avec une note d'introduction d'Einaudi," *Revue des Sciences économiques*, (Liège, avril, juin, octobre, 1936).
 18. Schumpeter, *History*, pp. 245, 248.
 19. P. D. Groenewegen, ed., *The Economics of A. R. J. Turgot*, (The Hague: Martinus Nijhoff, 1977), pp. xiv, 28.
 20. A. R. J. Turgot, *Reflections on the formation and the distribution of riches* (1770), (New York: Macmillan, 1898. Ronald L. Meek, ed., *Turgot on Progress, Sociology and Economics*, Cambridge, at the University Press, 1973, pp. 119–82. Groenewegen, ed., *Economics of Turgot*, pp. 109–22. Groenewegen, "Reinterpretation of Turgot's Theory of Capital and Interest," *Economic Journal*, 81, 2 (June, 1971), 327–40; I. C. Lundberg, Turgot's Unknown translator, *The Reflexions and Adam Smith*, (The Hague: Marinus Nijhoff, 1964), pp. 52, 60, 66. Haney, *History*, p. 923.
 21. Schumpeter, *History*, pp. 124, 175. Haney, *History*, p. 514–18.
 22. Candillac, *Le Commerce et le gouvernement*, part I, chapter 1. Charles Gide and Charles Rist, *A history of economic doctrines* (trans. by R. Richards under the direction of William Smart), (Boston: D. C. Heath and Co., (n. d.)), p. 48. Haney, *History*, p. 587. Roll, *History*, pp. 348–54. Cf. Keith Michael Baker, *Condorcet*, (Chicago: University of Chicago Press, 1975), pp. 114–17.
 23. Mably considered Cantillon's *Essai* the best work on the question of luxury in contrast to Hume whom Mably felt fell into gross error on the question. L'Abbé de Mably, *Contenant les principes*

- de négociations pour servir d'introduction du droit public de l'Europe fondé sur les traités. Collection complete de ourvres de L'Abbe de Mably*, (Paris: Ch. Desbrierre, L'An III de la Republic (1794–1795), t. V, 200. L'Abbé André Morellet, *Memoires* Paris, 1821, T. I, 33. Jean Joseph Louis Graslin, *Essai analytique sur la richesse et l'impôt*, (Paris: P. Geuthner, 1911), p. 365. Joseph Schumpeter, *History of Economic Analysis*, p. 175.
24. Henri Denis, *Histoire de la Pensée économiques*, (Paris: Presses Universitaires de France, 1966), pp. 101–102, 137–39, and 184. Luigi Cossa, *Histoire des doctrines économiques*, (Paris: Giard et Brière, 1899), pp. 268–69. Ronald L. Meek, *Economics and Ideology, and other essays*, (London: Chapman and Hall, 1967, pp. 18–22.
25. J. B. Say, *A Treatise on Political Economy*, (Philadelphia: Claxton, Remsen and Haffelfinger, 1880, reprint: New York: Augustus M. Kelley, 1971), pp. 387–411. J. B. Say, *Catechism of Political Economy*, (Philadelphia: M. Carey & Son, 1817), pp. 54–65. Haney, *History*, p. 356–57. Schumpeter, *History*, pp. 620–24. Spiegel, *The growth of economic thought*, pp. 257–64. Charles Comte, ed., *Oeuvres diverse de J. B. Say*, Paris, 1848), pp. 361–79. Charles Comte, ed. *Melanges et correspondance de J. B. Say*, (Paris: Chamerot, 1833), pp. 116–17, 287–89. George H. Hildebrand, Jr., *The theory of markets and the problems of economic crises, from Quesnay to Marx: a study in the history of economic thought*, Ithaca, New York, Cornell University Ph. D. thesis, 1942, 1–81. Edgar Allix, “La rivalité entre la propriété foncière et la fortune mobilière sous la Revolution,” *Revue d'histoire économique et sociale*, VI (1913), 297–348; this and other essays of Edgar Allix are a neglected, valuable source on early nineteenth century French economic thought.

The Influence of Cantillon's *Essai* on the Methodology of J. B. Say: A Comment on Liggio*

by Joseph T. Salerno
Rutgers University

One of the most important areas in which Cantillon influenced J. B. Say involves a set of issues which receives no explicit treatment in the *Essai*. I refer to the distinctive and pathbreaking methodology employed by Cantillon in his treatise.

Most modern historians of economic thought, it is true, credit Cantillon with exhibiting a high degree of methodological sophistication. For example, Schumpeter pays Cantillon, what is for Schumpeter, probably the greatest compliment when he names Cantillon as the first to attempt to “. . . construct a composite instrument or engine or organon of economic analysis . . . which functions *formally* in the same way, whatever the economic problem to which we may turn it.”¹ Others have noted the dexterity with which Cantillon wielded the tool of what Schumpeter has called “generalizing abstraction” in constructing his engine of economic analysis. For example, Hayek writes:

Within the confines of his theoretical analysis Cantillon wields its most important tool, the method of isolating abstraction, as we would call it today, with true virtuosity. He displays familiarity with the device of the *ceteris paribus* clause, as had indeed some other writers before him, with the device of the ‘isolated state’ and the progression from monopoly to more complicated cases in explaining price formation. He repeatedly excludes the effects of accidental circumstances in order to avoid over-complicating an already complex problem.²

Spiegel is of the same mind as Hayek in concluding that “Like Locke, Cantillon was a model builder who used the method of abstraction and the process of gradual approximation to arrive at meaningful insights.” Moreover according to Spiegel, Cantillon went further than Petty or Locke towards forming “. . . a system, a comprehensive and consistent whole in which the various elements of the economic process would fall into place.”³

In order to fully appreciate his methodological contributions, however, it is necessary to delve into the exact nature and derivation of Cantillon's “engine of

*This paper was presented at the Symposium on Richard Cantillon, at Pacific Grove, California, August 1980.

economic analysis.” From whence come the general and abstract laws or theories which compose this apparatus? In formulating his economic theories, Cantillon utilizes the axiomatic-deductive method. According to this method economic theories or laws are logically deduced from a few fundamental axioms. The axioms, in turn, are not merely arbitrary or hypothetical but are constituted by general facts ascertained by the theorist from his experience of reality. This is not to deny, of course, that the discernment of these facts may require an extraordinary degree of perspicuity on the part of the theorist as well as some familiarity with other sciences. The realism or, if you will, the truth of economic theories is thus made to depend upon the realism and completeness of the axioms and the absence of errors in the process of logical inference.

In Cantillon’s case the axiomatic basis of his theoretical system rests in large part on the following facts and relationships:

1. Population apportions itself to the available means of subsistence.
2. The amounts of land and labor necessary to produce any given good remains fixed indefinitely. (As Vickers has pointed out, this “. . . involves the assumption of unchanged coefficients of production and of constant returns in the several lines of production.”)⁴
3. Landowners, laborers, and entrepreneurs attempt to maximize their money incomes when partaking in the production process.
4. Consumers prefer to pay a lower rather than a higher price for a given good.
5. Changes in the economic data and the consequences thereof work themselves out over a longer or shorter period of time.
6. The utility of money consists in the spending. (This is as much as implied in Mr. Liggio’s statement that “Drawing from Cantillon, Smith noted men’s disposition to spend quickly their income from the sales of their production . . . ”)⁵

Although the above listing is meant to be illustrative rather than exhaustive, the enumerated facts serve as the axiomatic base from which are drawn the major components of Cantillon’s analytical organon.

At this point, I might mention that the axiomatic-deductive method had been employed in economic investigations with varying degrees of success by Cantillon’s predecessors and contemporaries. For example, it is Rima’s contention⁶ that “the earliest beginning of deductive analysis in economics” is to be found in Sir Dudley North’s precocious free-trade pamphlet, *Discourse upon Trade*, published in 1691. She also suggests that Petty’s technique “. . . was essentially that of deductive logic.”⁷ And, as I noted earlier, Spiegel attributed the use of the “method of abstraction” to Locke as well as to Cantillon. Also noteworthy is Isaac Gervaise, who today is widely recognized as one of the earliest antecessors of the monetary approach to the balance of payments. In his brilliant little pamphlet on *The System or Theory of the Trade of the World*, published in 1720,⁸ he consciously and expli-

citly adhered to the axiomatic-deductive method. Thus, he informs his readers in the Preface that the ensuing work “. . . contains such Principles, as seem to be capable of answering any Event in trade. I draw those principles from the natural Bent of Man; and the Remarks and Conclusions I infer from them, appear to me most natural.”⁹ Finally, in the year of Cantillon’s demise, the underrated monetary and balance-of-payments theorist, Jacob Vanderlint published a tract entitled *Money Answers All Things*¹⁰ in which he argued that “. . . as the Principles of Trade, I proceed on, are founded in the Nature of Things, and Constitution of the World itself, so I doubt not that they are capable of strict Demonstration”¹¹

Although the technique of formulating economic theories may not have set Cantillon far apart from his immediate predecessors and contemporaries, the use he made of this technique in essaying to develop a systematic and integrated explanation of the entire economic process made his a distinctive contribution. But this is by no means all. There are a number of other important features of Cantillon’s methodology which serve to further distinguish him from those who had gone before as well as from those who, for a long time, would come after. These distinctive features of Cantillon’s methodology include his emphasis upon the individual as the focal point for the analysis of the economic process as well as upon the subjective nature of the individual’s wants and desires which, as expressed through market demand, constitute the motive force of this process. Also, Cantillon was as concerned with explaining the dynamic processes by which market outcomes succeed one another as with the description and comparison of the initial and ultimate equilibria which bound market processes on either side. Finally, Cantillon seemed to grasp the essential value-freedom of the analytical propositions of economics.

To begin with, pervading the *Essai* is the modern subjectivist insight that, in the words of Professor Kirzner, “. . . consumer demand constitutes a vibrant, active market force, with a powerful positive impact on resource allocation, prices, and other market phenomena.”¹² According to Cantillon, it is the ever-changing “Humours and Fancies of men”¹³ which ultimately determine market prices and productive incomes and through them the allocation of land and labor resources. Moreover, in the case of labor, the subjective factor of demand plays a dual role. The pattern of relative demands for consumer’s good not only determines the equilibrium distribution of available labor resources but, as exercised by the land-owning class in particular, also regulates the secular trend of population growth and therefore the optimal size of the labor force itself. Thus, Cantillon entitles his chapter on population “The Increase and Decrease of the Number of People in a State chiefly depend on the Taste, the Fashions, and Modes of Living of the Proprietors of the Land.”¹⁴

Complementing Cantillon’s emphasis on subjective factors as the ultimate and active determinants of the direction and extent of economic activity is his focus on individual actors in analyzing the economic process. Cantillon’s methodological individualism marked a radical break with the crude macroeconomic theorizing

which marred the works of the most able and enlightened of contemporary writers including, e.g., Locke, Gervaise, and Vanderlint particularly in their treatment of monetary phenomena. The regnant macroeconomic approach of Cantillon's day attempted to explain economic phenomena and processes as the results of disembodied economic aggregates operating upon and interacting with one another. In its stead, Cantillon espoused an approach which aimed to render intelligible these same phenomena and processes by tracing them back to the individual choices and actions from whence they originated and of which they are ultimately composed. It is not too much to claim that Cantillon's greatest theoretical achievements such as his Austro-Wicksteedian treatment of market-price determination, his recognition of the crucial role of the entrepreneur in the market process, and his analysis of the monetary adjustment process are inseparably linked up with his individualistic methodology.

Cantillon's methodological breakthrough, especially as it bears upon his monetary theory, has been well-described by Vickers:

In Cantillon, as opposed to other writers of the first half of the century, the move in theory and in explanation toward a dynamic as opposed to a definitional and static description of monetary affairs took on a microscopic, micro-economic form. His economic analysis always started from individual economic magnitudes and quantities. The market place was the arena of economic action. Cantillon was interested in the same sense as Locke in the effect on market prices of changes in the relevant and determinant economic forces. But the logic of his *Essai* rested on the analysis of individual markets and prices ¹⁵

This discussion naturally leads into another salient feature of Cantillon's methodology which warrants attention. It involves Cantillon's seminal insight into the crucial role played by the time element in the working out of economic phenomena. In applying this key insight to the explanation of the economic process, Cantillon fashioned an analytical technique which was later "rediscovered" by Carl Mengér and perfected and formalized by subsequent Austrian economists, notably Ludwig von Mises and Hans Mayer. This analytical technique was aptly dubbed "causal-genetic" by Mayer. In Mayer's view, the causal-genetic theorist proceeds from the knowledge " . . . that the assignment of changes in the magnitudes at issue . . . occurs over time and indeed often over considerable periods of time, that the links of the series in which it occurs are *arrayed over time in a non-interchangeable order (causal relation!)*."¹⁶ Interestingly, Mayer argues that of the two approaches—the causal-genetic approach of Menger and the Austrians and the functional approach associated with the Lausanne School of Walras and Pareto—the latter is much the older and its adherents include not only precocious mathematical economists such as Cournot but mainstream classical economists. Mayer points to the view of John Stuart Mill " . . . that there is no one-way causal relationship between demand, price, and supply, but that these magnitudes mutually condition each other like elements of a mechanism."¹⁷

According to Mayer, it was only "the discovery of the importance of the subjective factor" which led in turn to the discovery of causal-genetic theorizing by Carl Menger.¹⁸ Mayer's doctrinal insight leads to an understanding of Cantillon's time-embracing analytical method as an outgrowth of his great emphasis upon the subjective factor of demand as the motive force of the economic process.

As I have noted above, Cantillon's stress upon the significance of the temporal element in economic life manifests itself in his overriding concern to move beyond a mere elaboration of the properties of comparative states of equilibrium to an explication of the dynamics of market processes. For instance, Cantillon's theory of market price centers upon an analysis of the *process* of price formation à la Wicksteed and the Austrians. This is clearly recognized by Hayek who argues that

The achievement of Cantillon's value and price theory derives its significance first and foremost from the fact that, instead of being satisfied to establish some rules and formulae, say, for the 'normal' relationship between the value and price of different goods, he consistently attempts to show what forces and process are involved, according as the normal relationship is necessarily restored.¹⁹

Moreover, Hayek characterizes Cantillon's explication of the process of market-price determination²⁰ as "directly reminiscent of the famous horse fair example of Böhm-Bawerk."²¹

Also, as Vickers has pointed out, Cantillon's discussion of the labor market²² proceeds within the dynamic context of " . . . the migration of labor resources throughout the economy in response to changing pressures of demands for commodities, and of the differential wage rewards payable throughout the hierarchy of labor types and units . . . " ²³ However, nowhere is Cantillon's mastery of causal-genetic or process analysis better illustrated than in his delineation of the process by which the purchasing power of money adjusts to a change in the money supply. It would be perhaps tedious and certainly superfluous for me to attempt to render yet another account of Cantillon's marvelous discussion of the monetary adjustment process.²⁴ Nonetheless, I believe it is of great importance to stress the methodological advances which characterize Cantillon's contribution. On this score, I can do no better than to quote a passage by Vickers wherein is revealed a deep understanding and appreciation of the methodological individualism as well as the causal-genetic nature of Cantillon's analysis:

This represents clearly a considerable theoretical advance. We are here confronted by a dynamic conception of the *working out* of a relationship of economic forces. Locke had clearly defined the nature of certain fundamental economic and monetary relationships. He had even indicated what empirically were the most likely directions of causation subsisting in them. But his work was definitional, equational, static, and his analysis did not at any point become a truly causal one The important thing in the theoretical description of the movement of the economy such as the eighteenth-century authors envisaged was not simply the nature or the design of the opposing ends of the economic process. The movement between the positions involved, between the underemployment of resources on the one hand and a fuller utilization on the other, or between one level of prices and another, became as important for analysis as the

respective positions themselves. But this conceals a conception which is vital to the meaning of Cantillon's *Essai*. Market prices, money prices, and levels of activity and employment were not to be regarded as homogeneous variables. The *Essai* is interested in the *structure* of market prices, the structure of market supply conditions, and the structure of activity in the economy. The corollary of this is that the movement of the economic process itself depended on the structure of its own determining forces. As Cantillon argued at length, the description of the process will necessarily differ, following, for example, an increase in the supply of money, depending on the direction from which the stimulus to change has come, and depending also on the differing dispositions, notably consumption habits, of the persons through whose hands the higher flow of money and incomes passes. Cantillon is concerned, we might say, with pointing out the nature of the time-path along which the economy moves following a disturbance of a position of rest. His argument is that the structure and description of the time-path is not independent of the direction of its own inception and movement.²⁵

There is nothing one could add to this except to note that Cantillon's profound insight into the monetary adjustment process was not to be matched until over a century later when Cairnes published his justly famed *Essays toward a Solution of the Gold Question*.²⁶ Another generation was to pass before Ludwig von Mises gave Cantillon's and Cairnes' analyses a firm foundation in the marginal utility theory of money. Not coincidentally, the method which Mises himself used in analyzing the monetary adjustment process closely parallels Cantillon's method. Referring to his classic work on *The Theory of Money and Credit* initially published in German in 1912, Mises writes:

On all its pages I used the 'step-by-step' method which is allegedly being rediscovered today [1940] as 'period analysis' or 'process analysis'. It is the only permissible method, which renders superfluous the argument between short-run and long-run economics. It also makes the distinction between statics and dynamics an idle question.²⁷

The step-by-step analysis must consider the lapse of time. In such an analysis the time-lag between cause and effect becomes a multitude of time differences between single successive consequences. Reflection on these time-lags then leads to a precise theory of the social consequences of changes in the purchasing power of money.²⁸

At this point, I wish to point out that Cantillon's *Essai* implicitly anticipates the latter day subjectivist critique of mathematical economics. In fact, in his description of the higgling or "altercations" which constitute the market process of price formation, Cantillon remarks ". . . this method of fixing Market prices has no exact or geometrical foundation, since it often depends upon the eagerness or easy temperament of a few Buyers or Sellers . . ." ²⁹ Cantillon makes the same point regarding the determination of the exchange rate or "ratio" between gold and silver. "It often depends," he says, "on the humour of men: the bargaining is done roughly and not geometrically."³⁰ Moreover, let us not forget that Cantillon's monetary process analysis, in demonstrating that a change in the money supply does not effect an equiproportional change in prices, overthrew the quantitative pretensions of the crude quantity theory. More generally, however, the critique of mathematical economics is logically implied in a mode of analysis which is time-filled and causal-

genetic in the Misesian-Mayerian sense and which is therefore poles apart from the essentially timeless, mathematical-functional approach of the Walrasian-Paretian type.

This discussion may shed some light on an issue which has recently arisen regarding Cantillon's doctrinal status. While admitting its obvious merits, some modern commentators on the *Essai* have argued that it does not contain a developed general equilibrium view of the economic system. Thus, Ekelund and Hebert, in their recent text on economic theory and method, contend that,

Cantillon attempted to construct a general equilibrium economic system encompassing all the important variables of the economic system including money Unfortunately, he failed in his quest to develop a cogent description of an interrelated system.³¹

Now this criticism is right on the money if one equates the concept of inter-relatedness among economic magnitudes with the concept of their mutual determination; and if one understands by general equilibrium analysis the construction or description of a system of simultaneous equations whose functions are reversible at will. However, as Mayer points out, in this conception of economic interrelationships,

all elements which balance each other in a state of rest are assumed to exist simultaneously. There is *no one-way causal connection* between them, but a *universal reversible dependence*, the so-called general economic interdependence. This makes possible the treatment of the totality by equations, which together yield a *simultaneous system excluding time and causality*.³²

Now the suppression of the categories of time and causality in general equilibrium analysis thus construed hardly recommends it as a standard of comparison for Cantillon in the first place. Still, if Ekelund and Hebert wish to disqualify Cantillon as a doctrinal antecedent of Walras, Pareto, Hicks, and Samuelson, I heartily concur. On the other hand, it is precisely because Cantillon's analysis stresses one-way, irreversible, cause-and-effect interrelationship among economic phenomena which unfold over time that it is more amenable to verbal-logical than to mathematical-functional statement. It is for this reason that I would rank Cantillon as an important forerunner of a school of theorists which includes Menger and the early Austrians, Wicksteed, Robbins, Hayek, and Mises. For lack of a better term and in full awareness of the oxymoron I am perpetrating, I would call this the "dynamic" general equilibrium school to set it off from the "static" Walrasian school as well as from the Marshallian partial equilibrium school.

Before concluding this discussion of Cantillon's methodology, it should be pointed out that Cantillon recognized that value judgements are or should be beyond the pale of analytical economics. Thus, according to Hayek, Cantillon engaged in a " . . . conscious and unremitting pursuit of 'pure theory,' of explanation of relationships divorced from value judgements"³³ Cantillon's strict adherence to *Wertfreiheit* in his economic analysis is explicitly indicated at two places in the *Essai*. First, during the course of his discussion of entrepreneurship, Cantillon

remarks that "It may perhaps be urged that Undertakers seek to snatch all they can in their calling and to get the better of their customers, *but this is outside my subject.*"³⁴ (Emphasis added.) Further on in the *Essai*, at the conclusion of his discussion of population, Cantillon states that "*It is also a question outside of my subject* whether it is better to have a great multitude of Inhabitants, poor and badly provided, than a smaller number, much more at their ease . . ."³⁵ (Emphasis added.) These two statements certainly demonstrate that Cantillon possessed a good grasp of the crucial distinction between positive economic propositions and normative evaluations relating to them and that he was determined to refrain from confounding the two.

It now remains for me to briefly indicate the influence that Cantillon's methodology had on Say. This task is easier than at first sight might appear. This is true for two reasons. First, Cantillon's general influence on Say through Quesnay and the Physiocrats, Turgot and Condillac has been ably documented by Schumpeter in his great *History of Economic Analysis* and is now beyond dispute.³⁶ Second, Say explicitly addressed himself at length to methodological concerns in his *Treatise on Political Economy*³⁷ and it is not difficult to detect Cantillon's influence in these discussions.

To begin with, like Cantillon, Say conceived economics as a fully integrated structure of abstract and general principles. The greatest confirmation of this point can be found in Say's blistering methodological criticisms of Smith's *Wealth of Nations*. For instance, at one point Say graphically characterizes the work as

. . . a promiscuous assemblage of the soundest principles of Political Economy, supported by the clearest illustrations, and ingenious statistical speculations, blended with instructive reflections; it is not a complete treatise . . . but an ill-digested mass of enlightened views and accurate information.³⁸

Say also says of the book that ". . . almost every portion of it is destitute of method."³⁹ And in a passage which was deleted from his *Treatise* in the sixth edition, Say labeled the *Wealth of Nations* "a chaotic collection of just ideas thrown indiscriminately among a number of positive truths."⁴⁰ In fact, according to Say, despite Smith's brilliant contribution, political economy had not yet received a rigorous, scientific treatment. It was just this deficiency which inspired Say to write the *Treatise*. Thus, he writes:

Nevertheless, we are not yet in possession of any acknowledged text-book on the science of Political Economy, in which the fruits of an accurate and enlightened observation are referred to general principles, which will be admitted by all judicious individuals; a work in which these results are complete, and so connected as to afford each other mutual support, and which every where, and at all times, may be studied with advantage.⁴¹

In undertaking "the execution of so useful a labor," Say ". . . only wished to unfold the manner in which wealth is produced, distributed and consumed."⁴² According to Gide and Rist, in this work, Say exhibited the scientific qualities of "a delight in uniformity, love of universality, and contempt for isolated

facts ⁴³ Lastly we might note that Schumpeter rated as Say's greatest contribution to analytic economics his conception of economic equilibrium.⁴⁴ Thus, Say did indeed conceive economics as a unified structure of analytical principles.

In formulating economic theories, Say adhered to the axiomatic-deductive method. But he advanced farther than Cantillon by explicitly describing and defending this method. According to Say:

Political Economy being composed, like the exact sciences, of a few fundamental principles and a great number of corollaries drawn from these principles, it is of importance . . . that its principles should be strictly deduced from observation ⁴⁵

Hence the advantage enjoyed by all, who, from distinct and accurate observation can establish the existence of these general facts, demonstrate their connexion and deduce their consequences. They are as certainly derived from the nature of things as the laws of the material world ⁴⁶

Say is careful to specify the fundamental axioms as broadly empirical and not merely hypothetical. Political economy " . . . does not rest upon hypothesis, but is founded upon experience."⁴⁷ Furthermore, Say argues,

. . . an hypothesis may, it is true, be resorted to, in order to exemplify and elucidate the correctness of the general reasoning, but can never be sufficient to establish a fundamental truth. Political Economy has become a science, only since it has been confined to the results of inductive investigation.⁴⁸

Say dismisses those who would attempt to confute the conclusions of economic theory by appealing to the facts. Noting that " . . . there is not an absurd or extravagant opinion that has not been maintained by an appeal to the facts . . . ," he argues that "a knowledge of facts, without a knowledge of the affinities which binds them together, is of no more value, than the crude information of a public clerk"⁴⁹ For Say, then, "political economy, . . . whenever the principles constituting its basis are the rigorous deductions of undeniable facts, rests upon an immoveable foundation."⁵⁰

In terms of conciseness, clarity, and consistency, the exposition of the axiomatic-deductive method which is contained in these passages certainly rivals the later treatments of Senior and Cairnes.

The next aspect of Cantillon's methodological impact on Say involves the recognition of the importance of the subjective factor which pervaded both of their works. In Say's case, this can readily be seen in his pathbreaking definition of production as " . . . the creation, not of matter, but of utility."⁵¹ Insight into the subjectivity of value also leads to Say's rejection of Smith's notion of "unproductive" labor and his conception of services as immaterial products possessing utility. I might also point to Say's well-known utility-oriented explanation of price determination as further evidence that he absorbed the subjectivist influences emanating from the *Essai*.

Precisely because of his subjectivist frame of reference, Say viewed economics as a qualitative science whose theories and propositions are incapable of exact quantitative formulation. In this vein, he writes:

It would be, however, idle to imagine that more precision, or a more certain direction could be given to this study from the application of mathematics to the solution of its problems. The *values* with which Political Economy is concerned, by admitting of the application of the terms *plus* and *minus* to them, are, indeed, within the province of the mathematics; but being, at the same time, subject to the influence of the faculties, the wants and the desires of mankind, are not susceptible of any rigorous appreciation, and cannot, therefore, furnish any *data* in absolute calculations. The essential requisite in political as well as in natural science, is the knowledge of the connexion between causes and their consequences.⁵²

Say's methodological individualism is an obvious concomitant of his subjectivism in value and price theory since it is the capacity to satisfy individual wants that ultimately endows an object with utility. In distribution theory, Say's methodological individualism is reflected in the pivotal role which the entrepreneur plays in the various markets for productive services. Moreover, in explaining the prices of all productive services by supply and demand, i.e., as the aggregate results of bargains struck between individual entrepreneurs and individual factor owners, Say not only unified distribution theory but rendered it " . . . much more exact than the Physiocrats', who conceived of exchange as taking place between classes only, and not between individuals."⁵³

Say also followed Cantillon in asserting the value-freedom of scientific economics. In a letter to Malthus, Say took a strong position on the matter. The economist, he writes,

. . . must be content to remain an impartial spectator. What we owe to the public is to tell them how and why such-and-such a fact is the consequence of another. Whether the conclusion be welcomed or rejected it is enough that the economist should have demonstrated its cause; but he must give no advice.⁵⁴

While, as I have attempted to demonstrate, Say adopted most of the methodological positions of Cantillon, he failed to give the time element its analytical due. As a result, Say eschewed the process analysis of Cantillon for the long-run comparative-static approach of Smith, particularly in his treatment of monetary phenomena. In fact, in Schumpeter's opinion, it was Say who dealt the coup de grâce to "Monetary Analysis" and ushered in the classical era of "Real Analysis" in which money was treated as a veil to be cast aside whenever one wished to deal with the fundamental processes of the economy.⁵⁵

It is indeed interesting to speculate upon the course that classical and neoclassical monetary theory might have taken had a classical economist of Say's stature absorbed and elaborated Cantillon's profound insights into the "microdynamics" of the monetary adjustment process. $MV=PT$ might well have appeared to modern economists as merely a jumble of symbols of no particular consequence; while the question of whether money matters might have been understood as only rhetorical and not the subject of serious debate.

NOTES

1. Joseph A. Schumpeter, *History of Economic Analysis*, ed. Elizabeth Boody Schumpeter (New York: Oxford University Press, 1968), p. 16.
2. Friedrich A. Hayek, *Introduction* to Richard Cantillon, *Abhandlung über die Natur des Handels im allgemeinen* (Jena: Verlag von Gustav Fischer, 1931), translation prepared by Micheál Ó'Súilleabháin for the Symposium on Richard Cantillon, Pacific Grove, California, August 1980.
3. Henry William Spiegel, *The Growth of Economic Thought* (Englewood Cliffs, N.J.: Augustus M. Kelley Publishers, 1968), p. 201 n. 58.
4. Douglas Vickers, *Studies in the Theory of Money 1690-1776* (New York: Augustus M. Kelley Publishers, 1968), p. 201 n. 58.
5. Leonard Liggio, "Richard Cantillon and the French Economists: Distinctive French Contributions to J. B. Say," paper presented at the Symposium on Richard Cantillon, Pacific Grove, California, August 1980, p. 13.
6. I. H. Rima, *Development of Economic Analysis*, rev. ed. (Homewood, Ill.: Richard D. Irwin, Inc., 1972), p. 36.
7. *Ibid.*, p. 37.
8. See Isaac Gervaise, *The System or Theory of the Trade of the World*, ed. J. M. Letiche (Baltimore: The Johns Hopkins Press, 1954), reprinted in Leonard Silk, ed., *Mercantilist Views of Trade and Monopoly: Four Essays 1645-1720*, *The Evolution of Capitalism* (New York: Arno Press, 1972).
9. *Ibid.*, p. 3.
10. Jacob Vanderlint, *Money Answers All Things*, ed. Jacob H. Hollander (Baltimore: The John Hopkins Press, 1914).
11. *Ibid.*, pp. 9-10.
12. I. M. Kirzner, *Market Theory and the Price System* (Princeton, N.J.: D. Van Nostrand Co., Inc., 1963), p. 100.
13. Richard Cantillon, *Essai Sur La Nature Du Commerce En Général*, ed. and trans. by Henry Higgs (New York: Augustus M. Kelley, 1964), p. 29.
14. *Ibid.*, p. 65.
15. Vickers, *Studies in the Theory of Money*, pp. 187-88.
16. See Leo Illy, "Fundamental Problems of Price Theory" (unpublished manuscript) p. 16.
17. *Ibid.*, p. 11.
18. *Ibid.*
19. Hayek, *Introduction*, p. 13.
20. For Cantillon's analysis of market price determination, see Cantillon, *Essai*, pp. 13, 65, 117-21.
21. Hayek, *Introduction*, p. 13.
22. Cantillon, *Essai*, pp. 19-27.
23. Vickers, *Studies in the Theory of Money*, p. 201 n. 58.
24. This discussion extends over three chapters in the *Essai*. See *ibid.*, pp. 159-99.
25. Vickers, *Studies in the Theory of Money*, pp. 188-89.
26. See John E. Cairnes, *Essays in Political Economy: Theoretical and Applied* (New York: Augustus M. Kelley, 1965), pp. 1-165.
27. Ludwig von Mises, *Notes and Recollections* (South Holland, Ill.: Libertarian Press, 1978), pp. 57-58.
28. *Ibid.*, p. 59.
29. Cantillon, *Essai*, p. 119.
30. *Ibid.*, pp. 277-79.

31. Robert B. Ekelund, Jr., and Robert F. Hebert, *A History of Economic Theory and Method* (New York: McGraw-Hill Book Company, 1975), p. 43.
32. See Illy, "Fundamental Problems of Price Theory," p. 12.
33. Hayek, *Introduction*, p. 11.
34. Cantillon, *Essai*, p. 55.
35. *Ibid.*, p. 85.
36. On Schumpeter's recognition of the uniqueness of the Cantillon-Turgot-Say tradition, see Joseph T. Salerno, "Comment on the French Liberal School," *Journal of Libertarian Studies*, 2 (Winter 1978), pp. 65-68.
37. Jean-Baptiste Say, *A Treatise on Political Economy or the Production, Distribution, and Consumption of Wealth*, 4th ed., trans. C. R. Princep, 2 vols. (Boston: Wells and Lilly, 1821).
38. *Ibid.*, p. xxvi.
39. *Ibid.*, p. lv.
40. See Charles Gide and Charles Rist, *A History of Economic Doctrines from the Time of the Physiocrats to the Present Day*, 2nd ed., trans. R. Richards (New York: D. C. Heath and Company, 1947), p. 122.
41. Say, *Treatise on Political Economy*, p. lvii.
42. *Ibid.*
43. Gide and Rist, *History of Economic Doctrines*, p. 126.
44. Schumpeter, *History of Economic Analysis*, p. 492.
45. Say, *Treatise on Political Economy*, p. xxxiii.
46. *Ibid.*
47. *Ibid.*, p. lxv.
48. *Ibid.*, p. xlvi.
49. *Ibid.*, p. xxviii.
50. *Ibid.*, p. xxvii.
51. *Ibid.*, p. 3
52. *Ibid.*, p. xxxiv.
53. Gide and Rist, *History of Economic Doctrines*, p. 129.
54. Quoted in *ibid.*, pp. 125-26.
55. Schumpeter, *History of Economic Analysis*, pp. 277-78, 282 n. 8.

The British Journal of Sociology

**The leading British journal in its field.
Published Quarterly.
Recent articles include:**

- | | |
|---|---|
| Women's occupational and family achievement in the U.S. class system | <i>Harold Benenson</i> |
| Mixed race' children in British society | <i>Anne Wilson</i> |
| The class of imagery of 'traditional proletarians' | <i>P. T. Allen</i> |
| The Chinese family firm | <i>Siu-lun Wong</i> |
| Beyond the market: the survival of family capitalism in the English merchant banks | <i>Michael
Lisle-Williams</i> |
| Status attainment or job attainment? | <i>Richard Breen</i> |
| Class imagery in a national sample of women and men | <i>Nicky Britten</i> |
| The distributional implications of de-industrialization | <i>David Lovatt and
Brian Ham</i> |
| Police socialization and police competence | <i>Nigel Fielding</i> |
| Catholic grievances and violence in Northern Ireland | <i>Christopher Hewitt</i> |
| Subscription enquiries to: | Routledge Journals
Broadway House
Newtown Road
Henley on Thames
Oxon RG9 1EN |

ROUTLEDGE JOURNALS

Erkenntnis

An International Journal of Analytic Philosophy

Editors:

CARL G. HEMPEL, WOLFGANG STEGMÜLLER, and WILHELM K. ESSLER

Erkenntnis is a philosophical journal publishing papers on foundational studies and scientific methodology covering the following areas:

- that field of philosophy associated today with the notions of 'Philosophy of Science' and 'Analytic Philosophy' (in a wide sense);
- the philosophy of language, of logic, and of mathematics;
- the foundational problems of physics and other natural sciences;

Subscription Information

1985, Volumes 22 and 23 (6 issues)

ISSN 0165-0106

Institutional rate: Dfl. 200,—/US\$ 76.00 per volume incl. postage/handling

Private rate: Dfl. 72,—/US\$ 27.50 per volume incl. postage/handling

Private subscriptions should be sent direct to the publishers.

D. REIDEL PUBLISHING COMPANY

A Member of the Kluwer Academic Publishers Group



P.O. Box 17, 3300 AA Dordrecht, The Netherlands
190 Old Derby Street, Hingham MA 02043, U.S.A.
Falcon House, Queen Square, Lancaster LA1 1RN, U.K.



the review of metaphysics a philosophical quarterly

MARCH 1985 | **VOL. XXXVIII, No. 3** | **ISSUE No. 151** | **\$7.50**

translations

MARTIN HEIDEGGER

The Self-Assertion of the German University

The Rectorate 1933/34: Facts and Thoughts

articles

COLIN FALCK

The Process of Meaning-Creation: A Transcendental Argument

AMIHUD GILEAD

Teleological Time: A Variation on a Kantian Theme

JOHN F. WIPPEL

Thomas Aquinas on the Distinction and Derivation of the Many from the One

ISAAC FRANCK

Maimonides and Aquinas on Man's Knowledge of God

JANICE FLOERSCH and

Summaries and Comments

Staff

philosophical abstracts

announcements

Individual Subscriptions \$20.00

Institutional Subscription \$30.00

Student Subscriptions \$10.00

Jude P. Dougherty, Editor
The Catholic University of America, Washington, D.C. 20064

Philosophy & Public Affairs *addresses today's issues*

INTERNATIONAL RELATIONS

Marshall Cohen, Moral Skepticism and
International Relations

Douglas Lackey, Missiles and Morals: A Utilitarian
Look at Nuclear Deterrence

Michael Walzer, The Moral Standing of States:
A Response to Four Critics

LAW

Anthony Ellis, Offense and the Liberal
Conception of the Law

W. A. Parent, Privacy, Morality, and the Law

Thomas L. Carson, Bribery, Extortion and "The
Foreign Corrupt Practices Act"

MEDICINE

Joel Feinberg, Voluntary Euthanasia and the
Inalienable Right to Life

Norman Daniels, Health-Care Needs and
Distributive Justice

Allen E. Buchanan, The Right to a Decent Minimum
of Health Care

WOMEN'S STUDIES

Susan Moller Okin, Women and the Making of the
Sentimental Family

Judith Jarvis Thomson, A Defense of Abortion

Gertrude Ezorsky, Hiring Women Faculty

20% DISCOUNT COUPON

Philosophy & Public Affairs

Subscriptions

Princeton University Press

3175 Princeton Pike
Lawrenceville, NJ 08648

1-year introductory subscription (U.S.A.)

☐ Individuals \$11.60

☐ Institutions \$18.00

Name: _____

Address: _____

_____ Zip _____

Coming in the

JOURNAL OF SOCIAL HISTORY

Now in its 18th year of publication

A historical interpretation of variations in
immigrant suicide rates

Social history and health policy – a
special issue

Child-naming practices and family values
– two United States cases

Childrearing and emotions in early
modern Europe

Other essays on United States and Euro-
pean working-class history; premodern
slavery; political and social change in the
United States

and many other articles and reviews, as
the JSH continues to serve as a central
journal in the field

Also: the JSH continues its discount book
service to individual subscribers – 25
percent off on titles from 13 American
and British publishers

*Annual subscription rates: \$37 institu-
tions, \$19 individuals, \$14 students*

Journal of Social History, Carnegie-Mellon University,
Pittsburgh, PA 15213

THE MODERN SCHOOLMAN

A Quarterly Journal Promoting Original and Scholarly Contributions in All
Fields of Philosophy

Edited by members of the College of Philosophy and Letters and the
Department of Philosophy, Saint Louis University.

HARRY R. KLOCKER, S.J.

Editor

THE MODERN SCHOOLMAN is published four times a year, in November, January, March, and May. Subscription price \$26.00 a year; single copies, \$6.50 each. *All claims for undelivered issues should be made within one year of the date of the issue.* THE MODERN SCHOOLMAN is indexed in the *Catholic Periodical Index* and *The Philosopher's Index*. Copyright © 1984 by THE MODERN SCHOOLMAN, Saint Louis, Missouri. Permission is required to reprint an article or part of an article. Any contributor who wishes a manuscript returned in the event of its rejection should enclose a stamped self-addressed envelope.

Address all communications to The Editor or The Business Manager, THE MODERN SCHOOLMAN, 3700 West Pine Blvd., Saint Louis, Missouri 63108. Foreign subscription agencies: NETHERLANDS: Swets & Zeitlinger, Keilbesgracht 471, Amsterdam; SPAIN: Anaquel Ediciones, Conde de Peñalver, 36, Madrid; FRANCE: Office général du livre; 14bis, rue Jean Ferrandi, Paris 6e.

Reason Papers

A Journal of Interdisciplinary Normative Studies

Articles

- Is Economics Independent of Ethics? *Jack High*
How the Jacksonians
Favored Industrialization *Paul McGouldrick*
Economic Warfare
in Defense of Liberty *Juliana Geran Pilon*
Choice and Rationality *Antony Flew*
On Improving Mankind
by Political Means *Lester H. Hunt*
Constraining the Choice Set: Lessons
from the Software Revolution *David Levy*

Discussion Notes

- The Randian Argument Reconsidered:
A Reply to Charles King *Paul St. F. Blair*
Is "Flourishing"
a True Alternative Ethics? *David L. Norton*

Review Essays & Reviews

- John Gray's *Mill on Liberty: A Defence*
and *Hayek on Liberty* *Nicholas Capaldi*
Tom Regan's *The Case for*
Animal Rights *John Hospers*

REASON PAPERS is published by the Reason Foundation, 1018 Garden Street, Santa Barbara, CA 93101. Send orders (\$5.00 per copy in US and Canada, \$6.00 elsewhere) to Reason Papers, Box 40105, Santa Barbara, CA 93140. Manuscripts should be accompanied by return postage and envelope. Copyright © 1985 by the Reason Foundation. All rights reserved.

NO. 10

SPRING 1985

Center for Libertarian Studies

Occasional Papers Series

1. **Methodology of the Austrian School**, Lawrence H. White. An historical study of the development of the subjectivist method of economic analysis. The focal point of Austrian analysis is the purposeful, acting individual, rather than aggregates or other "macro" constructs.
2. **The Production of Security**, Gustave de Molinari (translated by J. Huston McCulloch). A coherent and logically argued proposal for free-market defense services by a leading 19-century French laissez-faire economist.
3. **Toward a Reconstruction of Utility and Welfare Economics**, Murray N. Rothbard. A close critical inspection of the assumptions underlying orthodox welfare economics with a call for a sounder basis upon which to ground policy analysis.
4. **The Political Economy of Liberal Corporatism**, J.R. Stromberg, R.A. Child, Jr., R. Alexander. Historical investigations into the decline of market capitalism and the rise of State capitalism in early 20th-century America.
5. **Theory of Classical Liberal 'Industrielisme'**, Augustin Thierry (translated by Mark Weinburg). Observations on individual liberty by a major historian and social analyst of the French Restoration.
6. **Why the Futile Crusade?**, Leonard P. Liggio. A critique of capitalism's preeminent "contradiction"—its alleged dependence on foreign adventurism and exploitation—from the perspective of the American "Old Right," or classical liberal, position.
7. **The Clash of Group Interests and Other Essays**, Ludwig von Mises. Explains the process by which market arrangements for social and economic coordination have historically been supplanted by State power and an ultimate reversion to new forms of caste society.
8. **The Austrian Theory of the Trade Cycle and Other Essays**, Ludwig von Mises, Gottfried Haberler, Murray N. Rothbard, Friedrich A. Hayek. Theoretical analyses of business fluctuations and the effects of inflation. Highlighted are such Austrian concepts as the role of relative prices, faulty expectations and the misdirection of capital and labor brought on by monetary disturbances.
9. **Medical Malpractice: The Case for Contract**, Richard A. Epstein. Observes that recent trends in malpractice law point toward a reversion to forms of law characteristic of a status society. A case is made for putting the doctor-patient relationship on a sounder, contractual basis.
10. **Frank S. Meyer: The Fusionist as Libertarian**, Murray N. Rothbard. Demonstrates that the late conservative political theorist, F.S. Meyer, was basically a libertarian and that Meyer's Fusionism breaks down under analysis to either libertarianism or traditional conservatism.

All papers are \$4.00 each. The complete set of 10 papers can be purchased for \$35.00.

Non-U.S.: Please add \$.85 postage for each paper ordered; or \$3.50 for the complete set. Please send U.S. Dollars only.

Center for Libertarian Studies

P.O.Box 4091 Burlingame, California 94011 (415) 342-6569